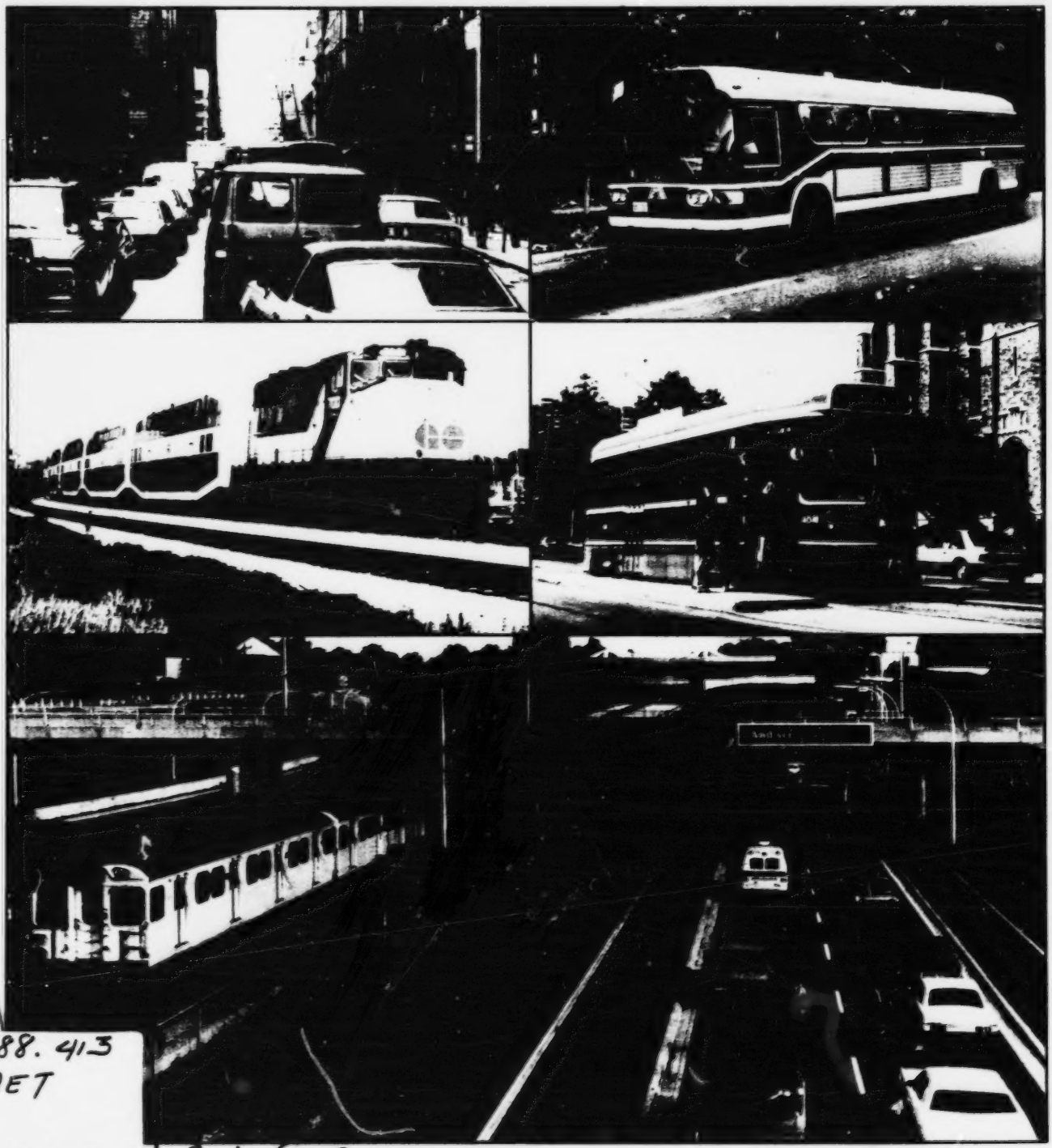
Metro Cordon Count Program - 1981



388.413
MET

388.413 MET

Metropolitan Toronto Planning Department

Metro Cordon Count Program — 1981

Metropolitan Toronto Planning Department
Transportation Section

December , 1981

PREFACE

The current Metro Cordon Count Program was established in 1975 by the Metropolitan Toronto Planning Department, following discussions with other planning and operating agencies within Metropolitan Toronto and the surrounding Regional Municipalities. Agreement was reached on the need for regular collection of consistent, comprehensive Metro-wide data on daily vehicle and person movements, in order to monitor changes in demand and to assist in the planning of additions and improvements to the transportation system. The Program was designed to be as compatible as possible with the historical cordon count programs of the City of Toronto and the Toronto Transit Commission.

The Program has subsequently been carried out biennially in 1977, 1979 and 1981. The 1981 count was undertaken by the Metropolitan Planning Department with the cooperation of the City of Toronto Department of Public Works, the Toronto Transit Commission (TTC), the Ministry of Transportation and Communications (MTC) and the Toronto Area Transit Operating Authority (TATOA). The MTC also subsidized 75 percent of the Planning Department's external costs, and provided data processing facilities at no charge to Metro. The assistance of the above agencies is greatly appreciated.

In 1981 counts were carried out during the same period by several of the neighbouring Regional Municipalities, using compatible standards, in order to provide a Region-wide set of consistent statistics in the decennial Census year.

This report presents a summary of data from the 1981 Metro Cordon Count, and also makes comparisons to the earlier counts. It should be noted that the report presents only a small portion of the total amount of information collected. Attempts to draw detailed conclusions should be made only after all the relevant information has been considered. This caution is

made because factors such as road construction or transit equipment failures can have significant effects on counts, and, therefore, on comparisons with information collected in previous years. Projections of long-term trends should not be made using rates of change based on a limited number of counts since anomalies of the type described above do exist. As data from each successive cordon count becomes available, projection of trends will become progressively more reliable.

CONCLUSIONS

The selected results presented in this report were prepared as a summary of the available information in order to identify the nature of the information collected and to make available various useful statistics regarding travel in Metropolitan Toronto. This report presents only a portion of the available information and possible analyses. Metro Cordon Count data is utilized by the Metro Planning Department and other agencies on an on-going basis as input to specific studies and in response to various information requirements.

Following are some general observations and conclusions made from the information presented in this report. For more specific conclusions refer to the text and exhibits of Chapter 4.

In general there has been an increase between 1979 and 1981 and between 1975 and 1981 in the vehicle and person movements counted at the cordons used in this analysis. The following table gives an indication of the magnitude of the changes which have occurred. For absolute numbers, see Exhibits 31 and 32.

PERCENT INCREASE
VEHICLES AND PERSON TRIPS CROSSING MAJOR CORDONS*
7:00 A.M. to 7:00 P.M., TWO WAY TOTALS

		Metro Boundary	Suburban Cordon	Railway Cordon	Downtown Core
Total Vehicles	1975-77	15.4	6.3	3.1	3.6
	1977-79	11.7	5.9	3.6	3.3
	1979-81	16.3	4.9	-1.3	4.2
	1975-81	49.8	18.1	5.4	11.5
Total Persons (by auto & transit)	1975-77	16.9	7.6	3.7	4.9
	1977-79	10.0	5.7	2.0	0.4
	1979-81	17.9	6.1	5.7	8.9
	1975-81	51.7	20.6	11.7	14.8

* See Exhibit 8

At all of the major cordons for the 7:00 A.M. to 7:00 P.M. time period, the total number of person trips by auto and transit increased by a greater amount than total vehicle trips, reflecting a consistently greater percentage of person trips using transit (including commuter rail). The most dramatic growth of trips in each Cordon Count year since 1975 has been at the Metro Boundary, as a result of continued growth of housing and employment opportunities in the Regions immediately adjoining Metro Toronto, and in the north-west and north-east portions of Metro itself. Smaller increases, and in some cases declines, of population and/or employment in other parts of Metro are reflected in lower rates of growth at the three inner cordons.

The total number of vehicles counted at the Railway Cordon in 1981 shows a decrease over 1979. As discussed in Chapter 4, the counts taken at this cordon, also possibly at the Suburban and Downtown Core Cordons, may have been affected by an extensive road reconstruction program under way during the period of the counts, involving at times closure of the Don Valley Parkway and Gardiner Expressway. For this reason, care should be taken in drawing any detailed conclusions. Nevertheless, overall increases in the proportion of person trips using transit are consistent with significant observed increases in revenue passengers on local transit and GO commuter rail lines in the Metro area.

Examination of the information presented in this report does not reveal any dramatic shift in overall travel patterns within Metro between 1975 and 1981. Most variations from the general trend in travel volumes can be attributed to either temporary or permanent operational changes to individual links of the system.

TABLE OF CONTENTS

	PAGE
PREFACE	i
CONCLUSIONS	iii
TABLE OF CONTENTS	v
LIST OF EXHIBITS	vi
1. INTRODUCTION	1
2. SURVEY PROCEDURE	6
3. DATA PROCESSING	8
4. SELECTED RESULTS	10
4.1 Vehicle and Person Movements	14
4.2 Average Auto Occupancy	17
4.3 Modal Split	17
4.4 Distribution of Trips by Time	18
4.5 Vehicle Trips Crossing Major Screenlines	18
4.6 Subway and Commuter Rail Flows	19
4.7 Expressway Flows	21
4.8 Vehicle and Person Trips Crossing Major Cordons	22

LIST OF EXHIBITS

		Page
1.	Locations of Screenlines and Counting Stations	3
2A.	Expressway Interchanges	4
2B.	Downtown Area	5
3.	Dates of Survey	7
4.	Vehicle Classification System	9
5.	Report Format - Vehicle Classification	11
6.	Report Format - Distribution of Person Trips	12
7.	Report Format - Occupancy Distribution of Autos	13
8.	Major Cordons Selected for Analysis	23
9A.	Vehicles Crossing Outer Cordons 7:00 A.M.-7:00 P.M. - 1979	24
9B.	Vehicles Crossing Outer Cordons 7:00 A.M.-7:00 P.M. - 1981	25
10A.	Vehicles Crossing Inner Cordons 7:00 A.M.-7:00 P.M. - 1979	26
10B.	Vehicles Crossing Inner Cordons 7:00 A.M.-7:00 P.M. - 1981	27
11A.	Vehicles Crossing Outer Cordons 7:00 A.M.-9:00 A.M. - 1979	28
11B.	Vehicles Crossing Outer Cordons 7:00 A.M.-9.00 A.M. - 1981	29
12A.	Vehicles Crossing Inner Cordons 7:00 A.M.-9:00 A.M. - 1979	30
12B.	Vehicles Crossing Inner Cordons 7:00 A.M.-9:00 A.M. - 1981	31
13A.	Vehicles Crossing Outer Cordons 4:00 P.M.-6:00 P.M. - 1979	32
13B.	Vehicles Crossing Outer Cordons 4:00 P.M.-6:00 P.M. - 1981	33
14A.	Vehicles Crossing Inner Cordons 4:00 P.M.-6:00 P.M. - 1979	34
14B.	Vehicles Crossing Inner Cordons 4:00 P.M.-6:00 P.M. - 1981	35
15A.	Persons Crossing Outer Cordons 7:00 A.M.-7:00 P.M. - 1979	36
15B.	Persons Crossing Outer Cordons 7:00 A.M.-7:00 P.M. - 1981	37
16A.	Persons Crossing Inner Cordons 7:00 A.M.-7:00 P.M. - 1979	38
16B.	Persons Crossing Inner Cordons 7:00 A.M.-7:00 P.M. - 1981	39

		Page
17A.	Persons Crossing Outer Cordons 7:00 A.M.-9:00 A.M. - 1979	40
17B.	Persons Crossing Outer Cordons 7:00 A.M.-9:00 A.M. - 1981	41
18A.	Persons Crossing Inner Cordons 7:00 A.M.-9:00 A.M. - 1979	42
18B.	Persons Crossing Inner Cordons 7:00 A.M.-9:00 A.M. - 1981	43
19A.	Persons Crossing Outer Cordons 4:00 P.M.-6:00 P.M. - 1979	44
19B.	Persons Crossing Outer Cordons 4:00 P.M.-6:00 P.M. - 1981	45
20A.	Persons Crossing Inner Cordons 4:00 P.M.-6:00 P.M. - 1979	46
20B.	Persons Crossing Inner Cordons 4:00 P.M.-6:00 P.M. - 1981	47
21.	Average Auto Occupancy at 4 Major Cordons	48
22.	Modal Split - 4 Major Cordons 1975, 1977, 1979 and 1981	49
23.	Distribution of Vehicles Crossing the Downtown Cordon	50
24.	Distribution of Persons Crossing the Downtown Cordon	51
25.	Distribution of Vehicles Crossing the Metro Boundary	52
26.	Distribution of Persons Crossing the Metro Boundary	53
27.	Vehicle Trips Crossing Major Screenlines	54
28.	Locations of Selected Counts on Major Transportation Facilities	57
29.	Selected Counts on Major Transit Facilities	58
30.	Selected Counts on Expressways	62
31.	Vehicle Trips Crossing Major Cordons	66
32.	Person Trips Crossing Major Cordons	67

1. INTRODUCTION

The Metro Cordon Count Program involves the counting of person and vehicle movements across a number of cordon lines enclosing various portions of the Metropolitan area. Each cordon consists of a set of component screenlines, which are located where practicable along physical barriers with limited crossings, such as river valleys, railways and freeways. The areas enclosed by the cordons and screenlines are designed to satisfy the requirements of a variety of planning purposes.

Counting stations are located wherever a road, subway line or commuter rail line crosses a screenline, with the exception of certain local streets where flows are too low to justify the effort and expense of counting. Counts are taken and recorded manually by field staff. Railway movements by Via Rail, CN and CP are not counted. In 1981, counts were taken at 367 counting stations.

Links added to the transportation system in Metro Toronto between 1979 and 1981 include the Bloor-Danforth Subway extensions to Kipling and Kennedy stations, the Neilson Road overpass and interchange at Hwy. 401 and the Highway 427 extension to Rexdale Blvd. Counting stations added in 1981 were:

- St. Thomas St. south of Bloor St.)
- Bay St. south of Bloor St.)
- Balmuto St. south of Bloor St.) New "Bloor" screenline added
- Yonge St. south of Bloor St.) by City of Toronto
- Church St. south of Bloor St.)
- Esna Park Dr. north of Steeles Ave.
- Birchmount Rd. north of Steeles Ave.
- Darcel Ave. west of Highway 427
- Neilson Rd. north and south of Highway 401

Four counting stations were dropped as a result of changes in road configuration or low traffic volumes. Exhibits 1 and 2 show the locations of the counting stations surveyed in 1981.

At each counting station, persons and vehicles were recorded by 15-minute period from 6:30 A.M. to 11:30 P.M. on one day. The following information was collected for each station, as appropriate:

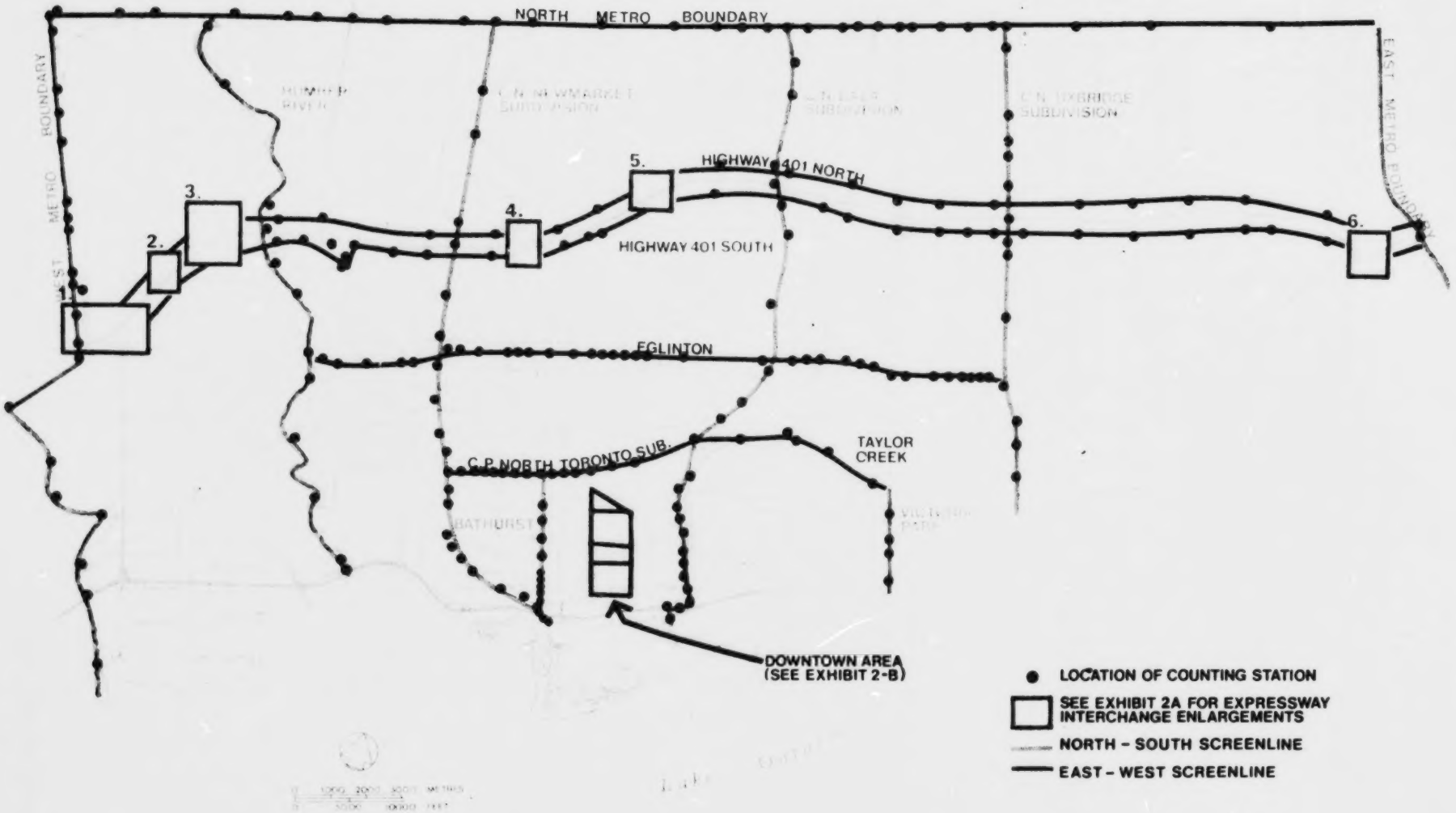
1. Number of Vehicles
    - (a) Private Autos
    - (b) Taxi Cabs
    - (c) Trucks
        - (i) Light
        - (ii) Medium
        - (iii) Heavy
    - (d) Buses
        - (i) Scheduled TTC buses
        - (ii) Other buses
    - (e) Streetcars
    - (f) Subway Cars
    - (g) Commuter Rail Cars

2. Number of Persons

    The number of occupants in each private auto, taxi, bus, subway car, streetcar, or commuter rail car was counted.

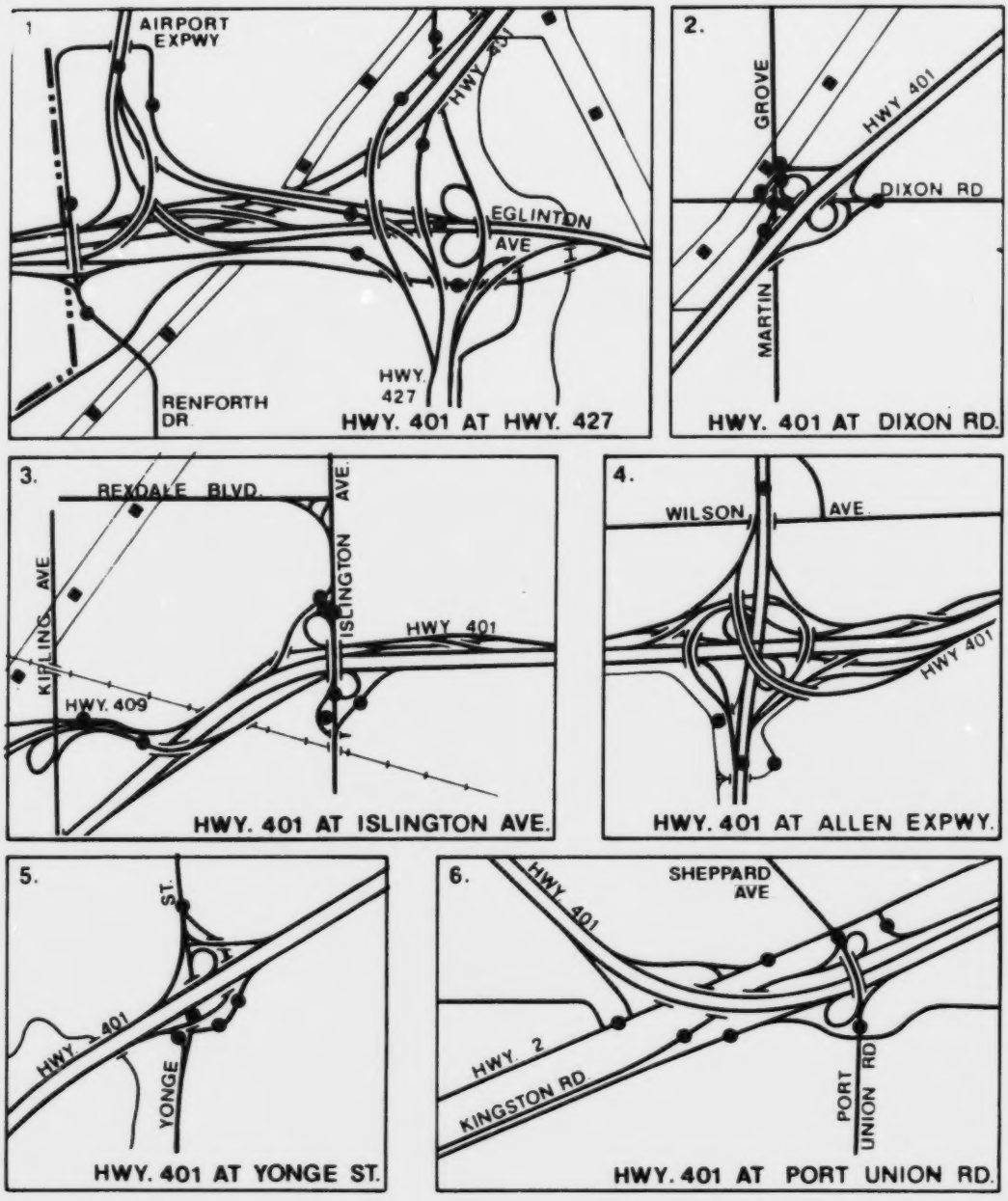
A series of computer programs was created for the Cordon Count Program which facilitate the checking, summarization and analysis of the collected data. Summary reports can be produced for any station or group of stations forming a screenline or cordon. Reports available show:

- distribution of vehicles by type,
- distribution of persons by mode (modal split),
- distribution of autos and taxis by number of occupants.



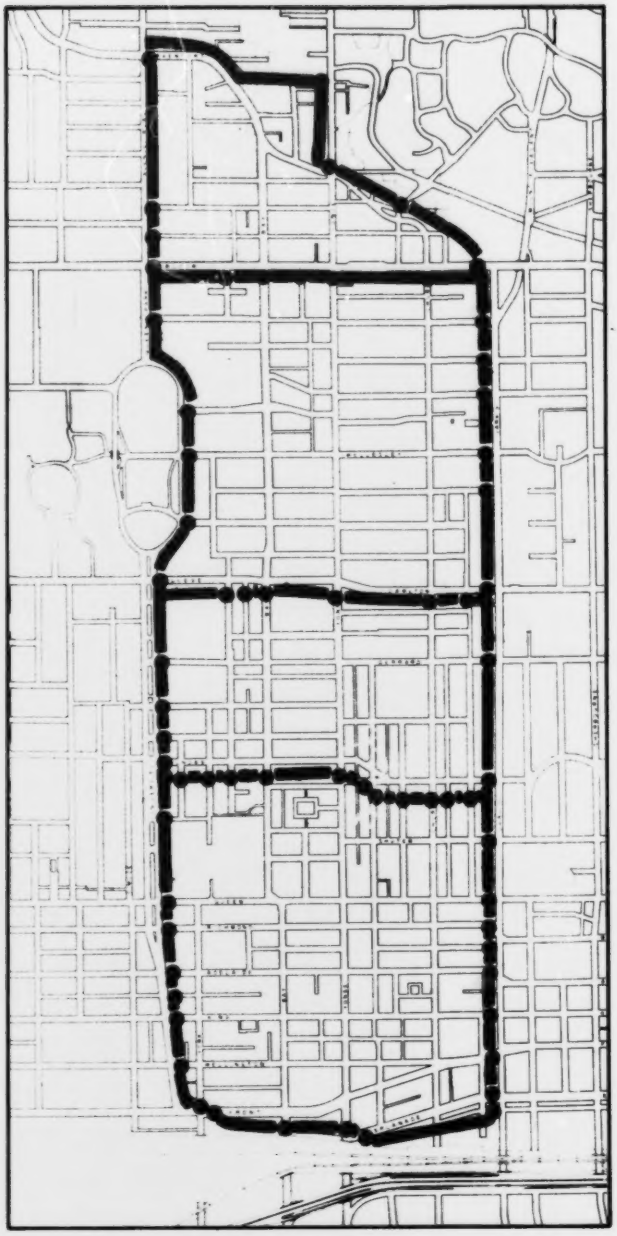
METRO CORDON COUNT PROGRAM - 1981

EXHIBIT 1 : LOCATIONS OF SCREENLINES & COUNTING STATIONS



METRO CORDON COUNT PROGRAM 1981

EXHIBIT 2A : EXPRESSWAY INTERCHANGES



METRO CORDON COUNT PROGRAM 1981

EXHIBIT 2B : DOWNTOWN AREA

The Metro Cordon Count Program provides an excellent base of information with which to gain an understanding of transportation operations and requirements within Metropolitan Toronto. It is an important component of a program to monitor transportation within Metropolitan Toronto and, therefore, is important in influencing decisions regarding improvements to the transportation system.

2. SURVEY PROCEDURE

As in previous years, the 1981 Cordon Count was undertaken between the beginning of May and mid-June on weekdays, excluding Fridays. Travel patterns on Fridays are not felt to be typical of weekday travel. The time of year was selected because student manpower is readily available, but travel flows are not severely affected by summer vacations. Exhibit 3 shows the schedule of counts by screenline for 1981.

Counts were taken from 6:30 a.m. to 11:30 p.m., as this period includes the majority of a day's trips and lends itself to the use of two 8½-hour shifts. Most of the stations in the City of Toronto were counted by staff hired by the City of Toronto Department of Public Works. Counts on subways were taken by TTC staff and GO Transit rail counts were supplied by TATOA. The remaining counts were undertaken by temporary staff hired by the Metropolitan Planning Department, supplemented by counting staff from MTC Central Region. The staff were trained prior to beginning the counting program, and their performance on the job was monitored by field supervisors, who also collected completed field sheets.

Roadside counts were made with mechanical hand counters, and totals for each 15-minute period entered on field sheets. The vehicle classification system used by the counting staff is shown in Exhibit 4. A one-day count

SCREENLINE NAME	MAY														JUNE												
	4	5	6	7	11	12	13	14	19	20	21	25	26	27	28	1	2	3	4	8	9	10	11	15	16	17	18
NORTH METRO BOUNDARY	X	X	X																								
HWY. 401 NORTH & SOUTH				X		X						X					X	X	X	X	X	X		X	X	X	X
EGLINTON													X	X			X										
CP NORTH TORONTO			X	X	X																						
TAYLOR CREEK															X												
WEST METRO BOUNDARY							X	X																			
HUMBER RIVER									X	X																	
CN NEWMARKET SUB					X	X																					
CN BALA SUB																X	X										
CN UXBRIDGE SUB										X	X																
EAST METRO BOUNDARY																							X				
BATHURST								X		X	X	X															
VICTORIA PARK															X												
DOWNTOWN CORE												X	X	X		X			X	X							
MIDTOWN AREA																			X	X	X	X	X				
DON RIVER					X	X	X																				

METRO CORDON COUNT PROGRAM 1981

EXHIBIT 3 : DATES OF SURVEY

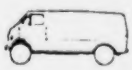
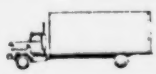
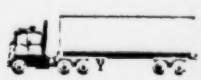
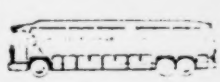
at a typical station required approximately 5 persons (i.e. two persons per shift, plus relief for meals, and rush hour assistance where warranted). Some busy locations required up to 10 persons in one day, while some low-volume stations required only one person per shift.

Counting station locations were carefully chosen to provide the best vantage points for counting vehicle occupants. At some poorly illuminated stations, it was not possible to count auto occupants after dark (approximately 9:00 P.M.). At these stations, therefore, person movement summaries are not available after 9:00 P.M. Bus and streetcar occupancies were estimated according to guidelines related to the degree of crowding. In the case of buses and other vehicles with heavily tinted windows, occupancy estimates were made by rule of thumb. Attempts in an earlier count to utilize inter-city and commuter bus passenger counts from the operating companies proved to be too cumbersome and unreliable. Occupants of trucks were not counted.

3. DATA PROCESSING

Data from TTC and TATOA counts were added to the field sheets completed by Metro Planning and MTC counting staff. The sheets were checked visually for completeness and consistency, and the data were then keyed on to computer tape. Data from stations counted by the City of Toronto were supplied already keyed on to tape.

The complete set of data was put through a computer edit program which checked for the presence or absence of TTC bus, streetcar, subway, GO commuter rail counts and after-dark counts according to indicators specified for each station. After correction and re-entry of any data

CLASSIFICATION	DESCRIPTION	EXAMPLES
AUTOMOBILES - AUTOS	passenger cars, station wagons, rancheros, jeeps, vans & pick-up trucks (private), cars with trailers	
- CAB	taxis and airport limousines	
TRUCKS - LIGHT	vans, pick-ups, small panels, rancheros, station wagons (commercial), jeeps (service station type), ambulance, police cars, public utility cars, hearses, etc.	
- MEDIUM	2 AXLES ONLY (dual rear tires) delivery trucks (Simpsons type), dump trucks, mail trucks, tow trucks, moving trucks, etc.	
- HEAVY	MORE THAN 2 AXLES dump trucks, tow trucks, cement trucks, oil trucks, moving trucks, delivery trucks, tractor-trailer trucks	
TRANSIT VEHICLES - BUS	TTC buses, large and small, plus trolley coaches (bus with electric pick-up)	
- STREETCAR	streetcars (electric pick-up, running on rails)	
- OTHER(bus)	ALL BUSES OTHER THAN TTC (school bus, GO Transit, Gray Coach, Voyageur, Mississauga Transit, Markham Transit, Airport buses, Colonial Coaches, etc.)	

METRO CORDON COUNT PROGRAM 1981

EXHIBIT 4 : VEHICLE CLASSIFICATION SYSTEM

found in error, a master file tape was created for use as input to the summary report programs. Copies of the final master file were provided to the City of Toronto and MTC.

The summary report programs can produce three types of report for a specified screenline (defined as one station or a combination of stations):

1. Distribution of Vehicles by Classification
2. Distribution of Persons by Mode
3. Distribution of Private Autos and/or Taxis by Occupancy

Each report is for one direction, and can be produced either by station within a screenline for a specified time period, or by time periods (15,30 or 60 minutes) for the total screenline. Grand totals are calculated, and in the case of report types 1 and 2, subtotals can be printed for either user-specified peak periods or computed maximum 1-hour or 2-hour periods.

The formats of the summary reports are shown schematically in Exhibits 5, 6 and 7.

4. SELECTED RESULTS

The bulk of this report consists of maps, graphs and tables prepared to show the type of information collected by the Cordon Count Program and the types of analysis that may be undertaken, and also to compare travel characteristics between 1979 and 1981 and to identify changes since 1975.

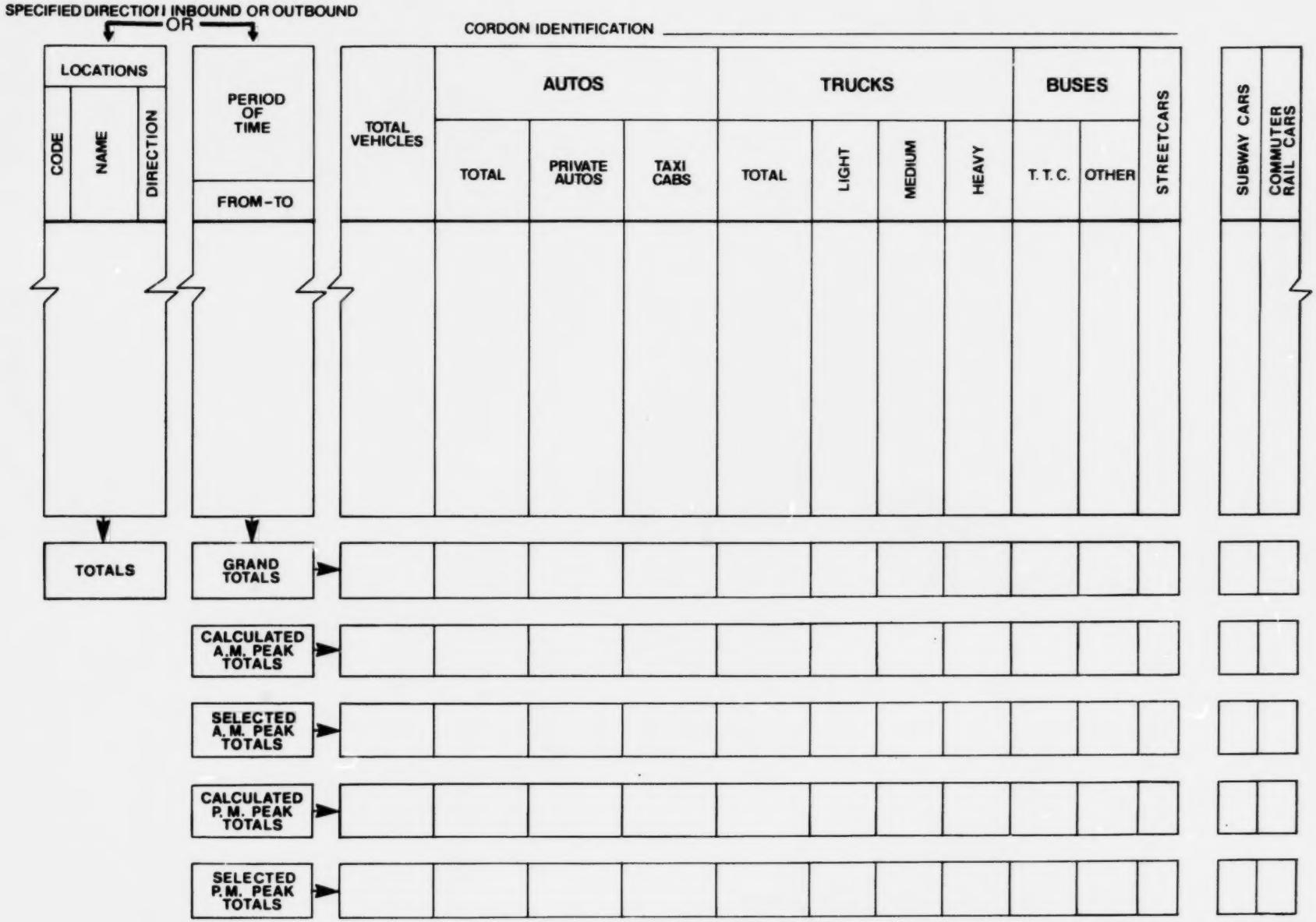


EXHIBIT 5: REPORT FORMAT
(VEHICLE CLASSIFICATION BY LOCATION OR PERIOD OF TIME)

SPECIFIED DIRECTION INBOUND OR OUTBOUND

OR

CORDON IDENTIFICATION _____

LOCATIONS			PERIOD OF TIME	TOTAL PERSON TRIPS	AUTOS			TRANSIT					
CODE	NAME	DIRECTION	FROM–TO		TOTAL	PRIVATE AUTOS	TAXI CABS	TOTAL	TTC BUSES	OTHER BUSES	STREET CARS	SUBWAY	COMMUTER RAIL
TOTALS			GRAND TOTALS										
			CALCULATED A.M. PEAK TOTALS										
			SELECTED A.M. PEAK TOTALS										
			CALCULATED P.M. PEAK TOTALS										
			SELECTED P.M. PEAK TOTALS										

EXHIBIT 6 : REPORT FORMAT

(DISTRIBUTION OF PERSON TRIPS BY LOCATION OR PERIOD OF TIME)

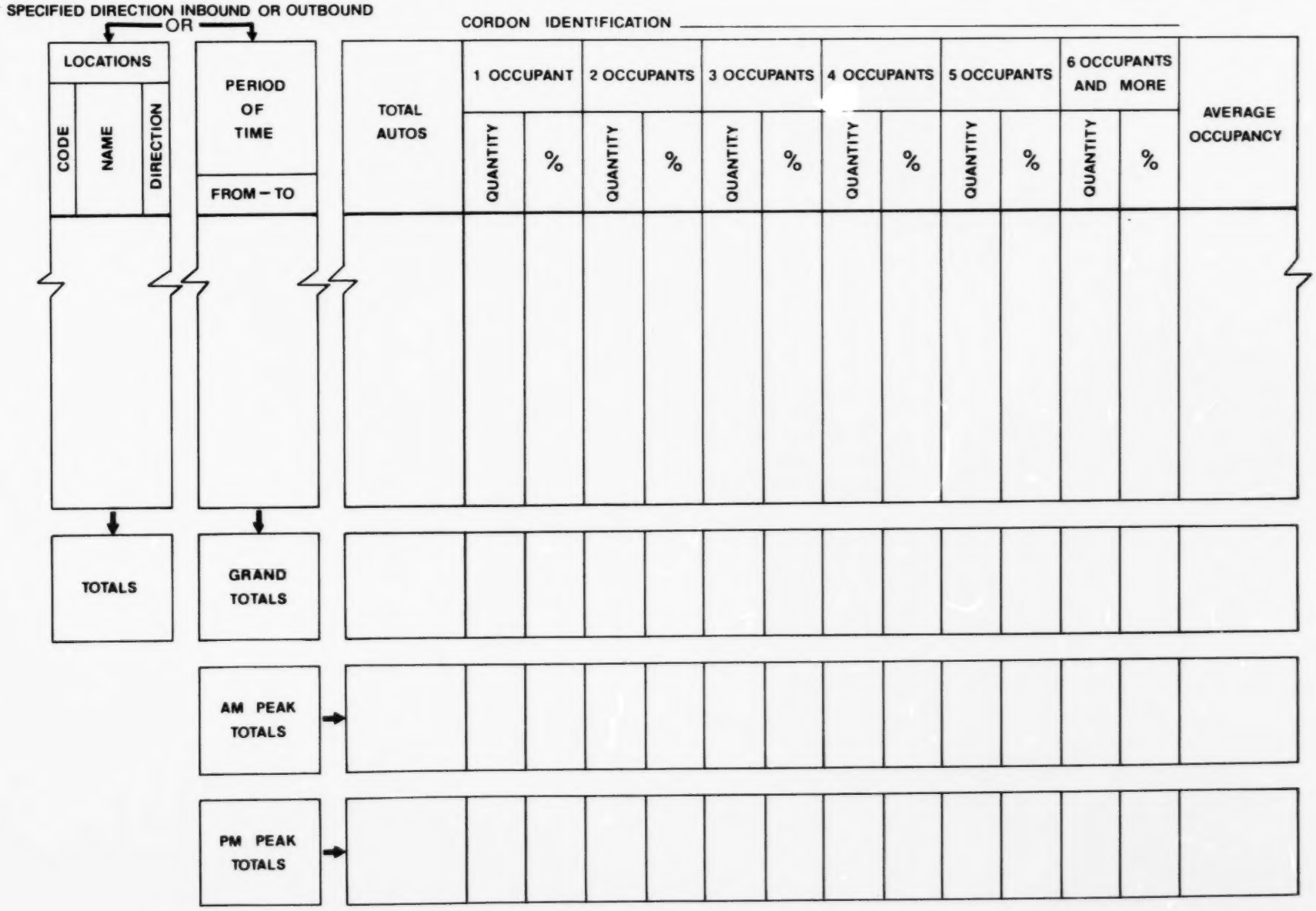


EXHIBIT 7 : REPORT FORMAT

(OCCUPANCY DISTRIBUTION OF AUTOS BY LOCATION OR PERIOD OF TIME)

Exhibit 8 shows the major cordons that were selected to illustrate characteristics of vehicle and person flows at varying distances from the Downtown Core of Toronto.

4.1 VEHICLE AND PERSON MOVEMENTS

Exhibits 9 through 20 present information on 1979 and 1981 counts of vehicles by type and persons by mode crossing each of sixteen screenlines which make up the cordons identified in Exhibit 8. Inset figures show percentage changes by screenline from 1977 to 1979, 1979 to 1981, and 1975 to 1981.

Vehicle flows shown include autos, taxis, trucks, buses and streetcars, but not subway and commuter rail cars which do not operate on roads. Person flows include persons travelling by auto, taxi, bus, streetcar, subway and commuter rail; however, drivers of taxis, trucks and transit vehicles are not included as they are considered to be part of the vehicle and generally not making trips for their own purposes.

The majority of screenlines show an increase in both peak period and all-day person and vehicle trips between 1979 and 1981; virtually all screenlines show an increase in the 6 years since 1975.

The greatest increases have occurred at the Metro Boundary. During the 7:00 A.M. to 7:00 P.M. period, vehicle trips crossing the North Metro Boundary increased by about 25 percent in each direction between 1979 and 1981, compared to 55 percent since 1975; the increases in person trips were slightly higher. At the West Metro Boundary for 1981, the 12-hour

vehicle and person trips showed increases of between 12 and 14 percent over 1979, and between 45 and 50 percent since 1975. Increases of 12 to 16 percent inbound and 5.5 to 6.5 percent outbound over 1979 were recorded at the East Boundary; increases since 1975 range from 44 to 61 percent.

The increases at the West Metro Boundary can be attributed primarily to steady growth in both population and employment in Peel Region. Many new Peel residents hold jobs in Metro, while new industrial growth in North Mississauga tends to attract employees living in North and West Metro. At the North Boundary, rapid growth over the past two to three years in population and employment opportunities, both in south York Region and in north-west and north-east Metro, accounts for the accelerated growth rate of travel. Slower rates of growth at the East Boundary reflect slower development of Metro-oriented housing and employment opportunities in Durham Region.

Peak Period Counts at the Metro Boundary Cordon show similar rates of growth to the all-day counts, with somewhat more variation.

Counts at the Suburban Cordon show general increases in 1981 over both 1975 and 1979, although a few screenlines show slight decreases. The decreases may be due to random variations in flows or in counting procedures, or to shifting patterns of employment and/or reduced population densities in many older areas as a result of declining household size.

At the Railway Cordon, the counts show decreases between 1979 and 1981 in vehicle flow inbound at the East Screenline and outbound at the West Screenline. The person flows show a mixture of increases and slight decreases.

It is felt that the counts taken at this cordon in 1981 may not be typical, due to extensive road reconstruction taking place during the survey period. Portions of the Don Valley Parkway and Gardiner Expressway were closed to traffic between 7:00 P.M. and 6:00 A.M., and on some days closures were in effect during the daytime. Wherever possible, counts at the inner cordons were scheduled to avoid days when road closures could be expected to interfere with normal travel patterns, but this was not always feasible. As a result, the counts may represent a somewhat distorted picture, and counts taken at different stations on different days may not be compatible.

The same factors may also be expected to affect counts at the inner screenlines cordonning off the Central Area. Vehicle counts show a mixture of increases and decreases, including a few significant decreases compared to both 1979 and 1975. This could be attributable to re-routing of vehicular trips to avoid road construction areas. The person trip flows into and out of the Central Area show a general increase over 1979, with one screenline showing a decrease in the 12-hour period, two in the A.M. and three in the P.M. peak periods. This indicates a shift in travel from auto to transit, perhaps partially attributable to the road construction situation.

4.2 AUTO OCCUPANCY

Exhibit 21 presents average auto occupancies by year at each cordon, for peak and all-day periods. In all cases, auto occupancy has declined between 1975 and 1981. Occupancies are highest at the Downtown Core and lowest at the Metro Boundary Cordon. Occupancies are also lowest in the A.M. peak period, when work trips predominate. In most cases, P.M. peak period occupancy is similar to or slightly higher than the 12-hour average, due to the influence of non-work trips such as shopping and social/recreational, which are characterized by higher occupancy rates. There may also be a greater degree of ride-sharing or informal car pooling in work-to-home trips than in home-to-work.

4.3 MODAL SPLIT

Exhibit 22 illustrates the variation in modal split, or percent of person trips using transit (including commuter rail), at the four major cordons by direction and time period for the years 1975 to 1981. The increase in the modal split as one gets closer to the Central Area can be clearly seen. With one exception, the percentage of trips by transit increased between 1979 and 1981, most noticeably at the Railway Cordon. This is in contrast to the up-and-down fluctuations between the 1975, 1977 and 1979 counts.

The observed modal split is consistently highest for the inbound direction between 7:00 and 9:00 A.M., and is only slightly lower in the outbound direction between 4:00 and 6:00 P.M. Modal split tends to be higher for work and school trips, which predominate at these times, than for other purposes.

As indicated in Section 4.1, the apparent increase in modal split at the Railway and Downtown Cordons may be partially the result of road construction

at the time of the counts. However, both TTC and GO Transit have experienced significant increases in overall patronage in the last two years.

4.4 DISTRIBUTION OF TRIPS BY TIME

Exhibits 23 and 24 illustrate graphically the variation of vehicle and person flows at the Downtown Core Cordon by 15-minute periods, inbound between 7:00 and 10:00 A.M. and outbound between 3:00 and 6:00 P.M.

Both vehicle and person trip graphs show a tendency towards a higher proportion of trips early in the A.M. peak period. This may be due partially to the introduction of staggered work hours, and partially to a desire to avoid peak hour congestion. The P.M. peak graphs, while not showing as definite a trend, do suggest a similar tendency to travel later in the peak period, possibly for the same reasons.

Exhibits 25 and 26 show similar graphs for the Metro Boundary Cordon. The year to year overall increases are clearly seen. Slight trends towards an earlier peak in the A.M. and a later one in the P.M. can also be seen.

4.5 VEHICLE TRIPS CROSSING MAJOR SCREENLINES

Exhibit 27 is a summary tabulation of vehicle flows by type, time period and year across selected individual screenlines. Declines in vehicular volumes from 1979 are seen at many of the inner screenlines. As discussed earlier, this may be partially related to road construction activity at the time of the counts. In all cases, 7:00 A.M. to 7:00 P.M. total vehicle flows have increased since 1975, but decreases from 1975 are recorded at

the Taylor Creek Screenline in the A.M. peak period and at the Bathurst, C.P. North Toronto and Taylor Creek Screenlines in the P.M. peak period. The largest increases are seen at the screenlines forming the Suburban and Metro Boundary Cordons, as also shown in Exhibits 9 through 20 and discussed earlier.

4.6 SUBWAY AND COMMUTER RAIL FLOWS

Exhibit 29 tabulates 1-hour peak direction and 12-hour two-way passenger counts by year on selected subway and commuter rail lines at screenline crossing points, which are identified by number on Exhibit 28.

Counts in 1981 on the Yonge Subway north of York Mills station show increases over both 1979 and 1975. North of Bloor, the increase in passengers between 1979 and 1981 more than offsets the decrease between 1977 and 1979, which was largely due to diversion of travel following the opening of the Spadina Subway. On the Spadina Subway, substantial increases were recorded between 1979 and 1981 north of Dupont and south of Wilson station, with the exception of a 2.2 percent increase in the P.M. peak hour northbound at Wilson. Passenger volumes on the Spadina Subway in 1981 were about 40% of those at corresponding locations on the Yonge Line.

Counts taken in 1981 on the Yonge and University Subways south of College Street show increases over 1975 and 1979 for the A.M. peak hour inbound and the 2-way all day totals, but show decreases from 1979 in the P.M. peak outbound (northbound) direction. Counts on the Bloor-Danforth Subway also show a decrease or negligible increase in the P.M. peak hour outbound at three locations, with increases over 1975 and 1979 in the A.M. peak and the 12-hour totals.

The reasons for these decreases in the P.M. peak hour are not clear, since decreases are not observed in total persons outbound between 4:00 and 6:00 P.M. at the Downtown, Midtown and Railway Cordon screenlines, with the exception of the north Midtown screenline which includes the Yonge Subway north of Bloor station. The calculation of the peak hour volume (defined as the highest total of 4 consecutive 15 minute periods) is quite sensitive to minor schedule irregularities, as the inclusion or omission of one or two trains in a given counting period can affect the totals by 1,000 or more passengers. This could be one explanation of the year to year fluctuations in peak hour subway volumes.

The peak hour counts on GO Transit commuter rail routes show increases ranging from 13.6% to 44.7% between 1979 and 1981. The highest overall growth was recorded on the Lakeshore Line. Since GO trains operate on relatively wide headways, rescheduling of one train or addition of an extra run can have a significant effect on the peak 1-hour volume from one count to the next. The growth in all-day GO train trips is consistent with TATOA's observed increase in revenue passengers. The capacity of the commuter rail system has been steadily expanded since the 1975 Cordon Count by the introduction of bi-level cars and expansion of park-and-ride facilities at stations, in addition to the introduction of new services to Georgetown (1974), Richmond Hill (1978) and Milton (1981, after the Cordon Count). These factors have combined to produce a significant rate of growth of GO train passengers.

It should be noted that counts for 1975 are not shown in Exhibit 29 because of errors and inconsistencies in the counting procedures for commuter rail; these were rectified in 1977.

4.7 EXPRESSWAY FLOWS

Exhibit 30 summarizes vehicle flows on selected expressways where they cross screenlines. The locations of the counts are shown on Exhibit 28.

On Highway 401 the 12-hour two way vehicle flows show increases from 1979 to 1981 at five of the six locations tabulated; a decrease of 8.8% is shown at the C.N. Bala Subdivision (west of Leslie St.). The A.M. and P.M. peak hour flows at this location show substantial decreases. Peak hour decreases or minimal increases are also shown at the Humber River and the C.N. Newmarket Subdivision (east of Keele St.). Construction work in the vicinity of Yonge Street, reducing the road capacity, could explain the decreases at the three locations referred to above.

Counts on Highways 401, 409 and 427 show increases ranging from 4.4% to 27.2% between 1979 and 1981. W.R. Allen Road south of Highway 401 shows a minimal increase from 1979 to 1981, compared to substantial increases between 1975, 1977 and 1979; this facility was extended from Lawrence to Eglinton Avenue in 1976.

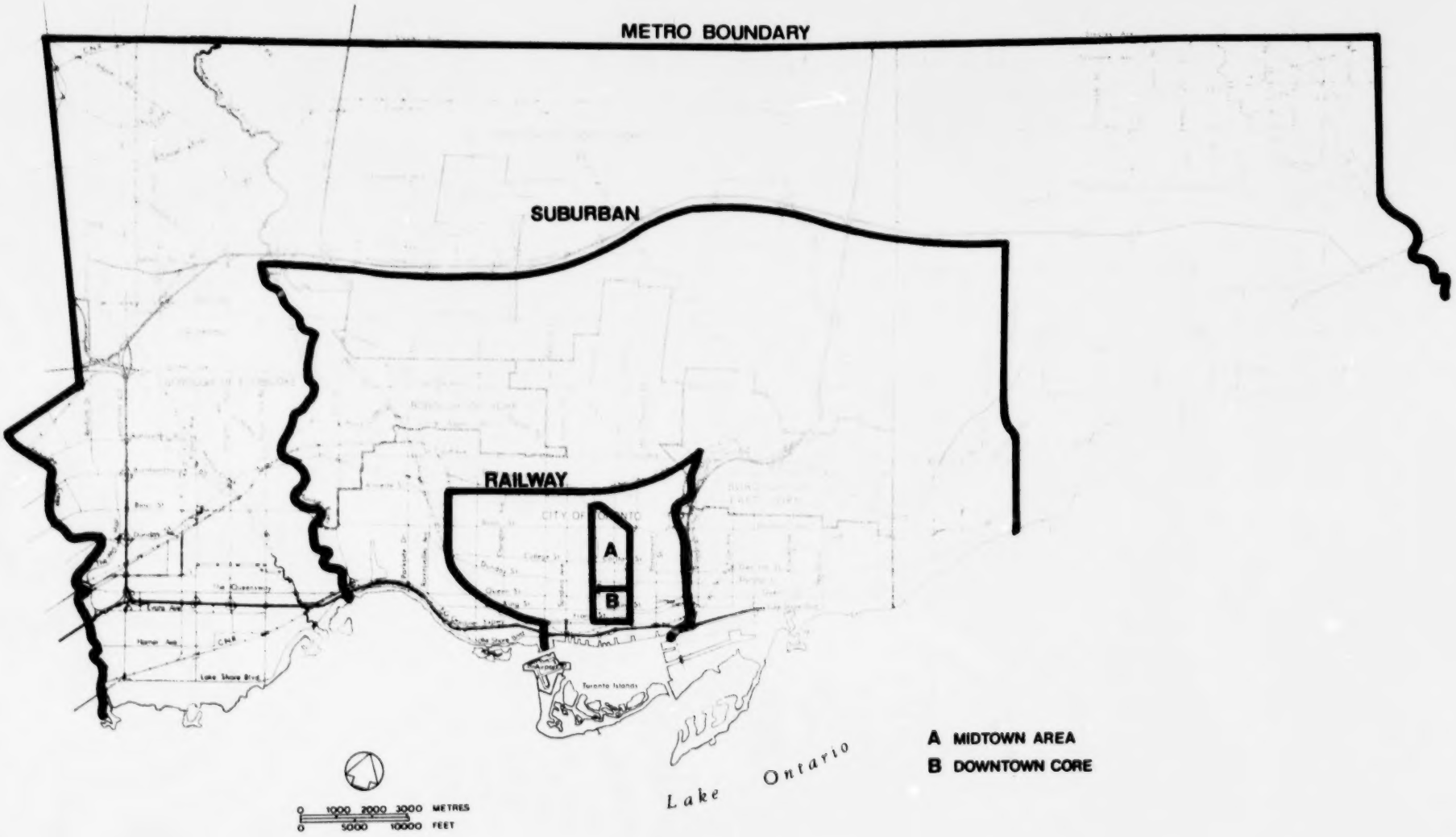
On the Don Valley Parkway/Highway 404, increases are recorded between 1979 and 1981 in all time periods at the north Metro boundary and south of Highway 401, reflecting the northerly extension of Highway 404 serving increased development in York Region. At Taylor Creek, slight decreases are indicated in the A.M. peak and 12-hour counts, with a 21% increase in the P.M. peak hour. This section of the Parkway operates at close to capacity during peak periods, and unstable flow rates can occur. The decrease in the 12-hour count may be related to the road construction situation.

On the Gardiner Expressway/Queen Elizabeth Way, an increase over 1979 was recorded at the West Metro Boundary in the A.M. peak hour and in the 12-hour 2-way total, with a slight decrease in the P.M. peak hour. At Bathurst St. and Cherry St., decreases or a negligible increase are observed for both peak periods and the 12-hour totals. Again, this may reflect the road construction situation.

4.8 VEHICLE AND PERSON TRIPS CROSSING MAJOR CORDONS

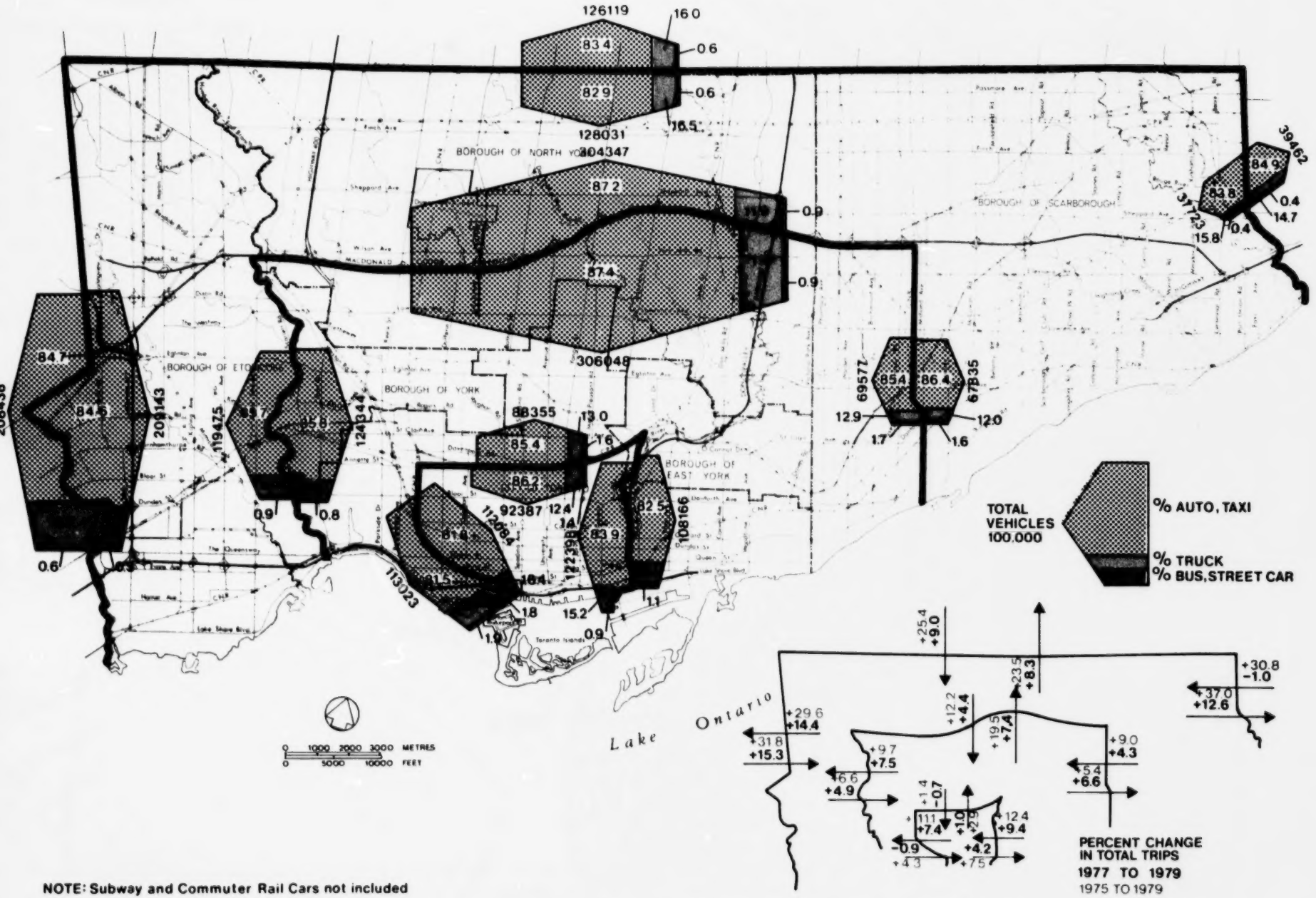
Exhibit 31 summarizes total vehicle trips by type crossing the four complete major cordons for the A.M. and P.M. 2-hour peak periods and the 7:00 A.M. to 7:00 P.M. two-way total. This table is an aggregation of information already presented and analyzed, and will not be discussed further. It is useful in that it presents on one page an overview of the relative changes in vehicle flow and composition at each cordon for the four counts.

Exhibit 32 presents a summary similar to Exhibit 31, but of person trips across the four cordons.



METRO CORDON COUNT PROGRAM 1981

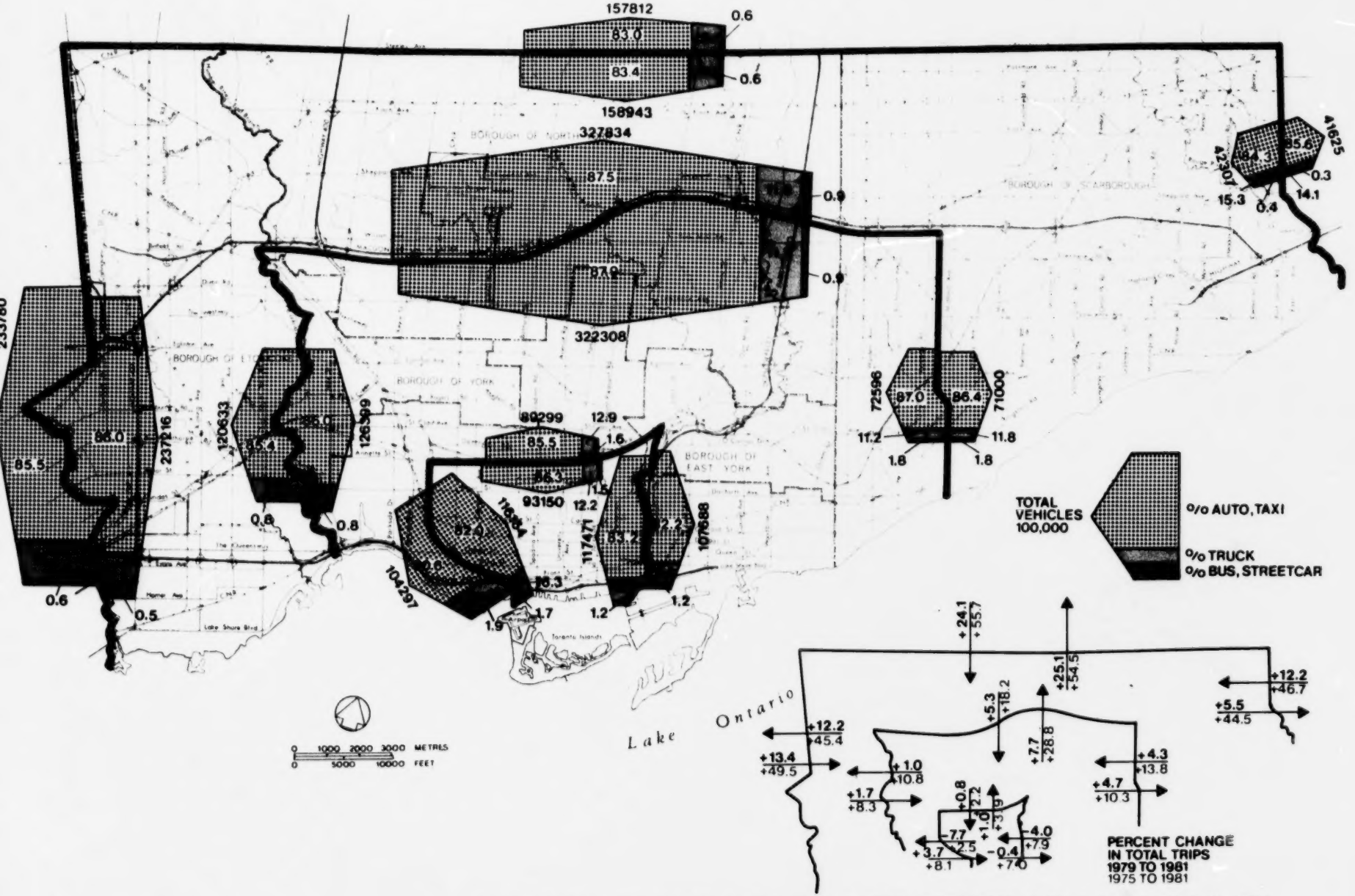
EXHIBIT 8: MAJOR CORDONS SELECTED FOR ANALYSIS



NOTE: Subway and Commuter Rail Cars not included

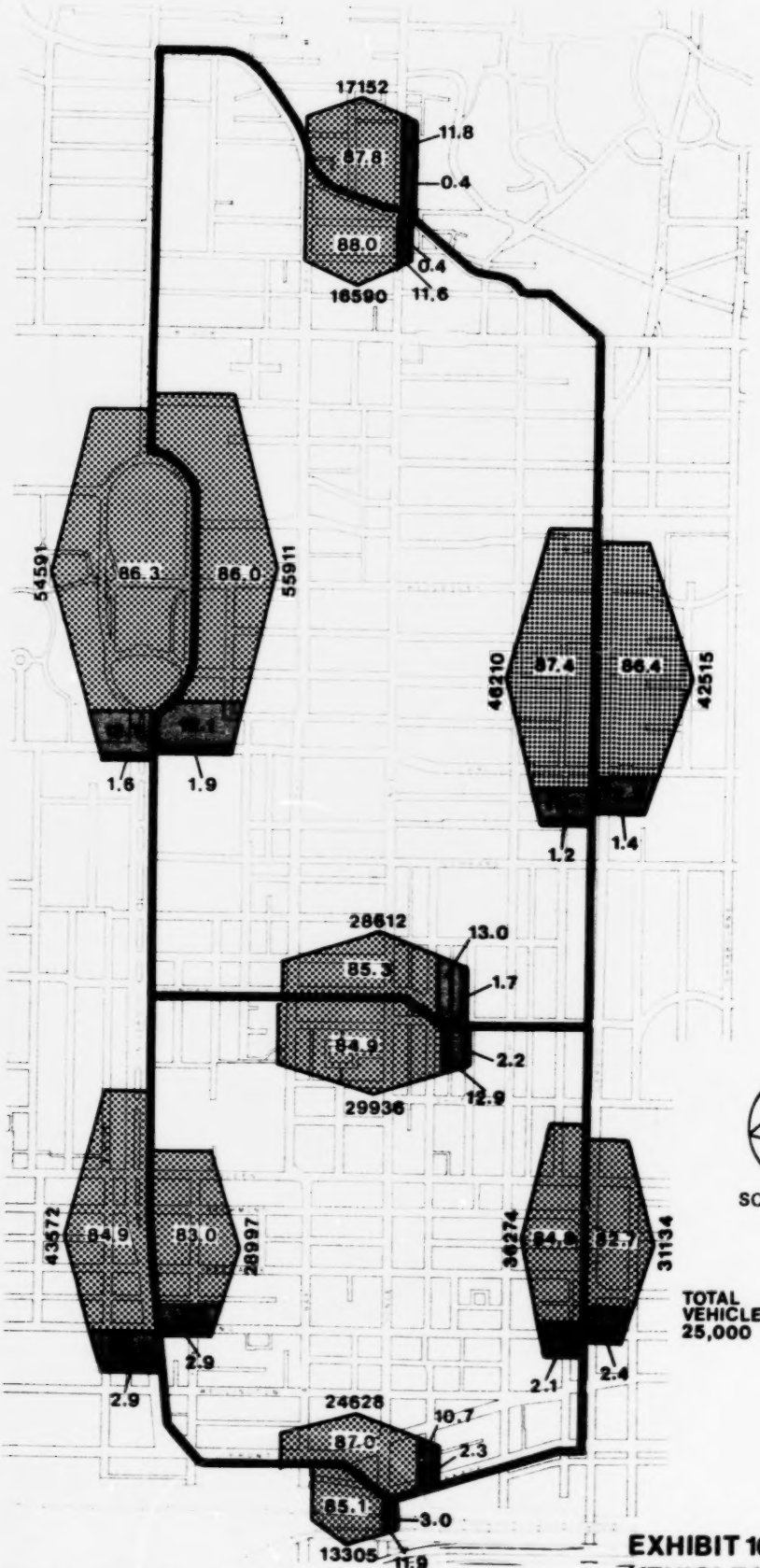
METRO CORDON COUNT PROGRAM 1981

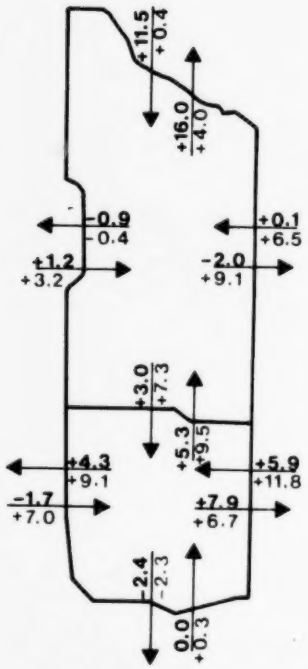
EXHIBIT 9A : VEHICLES CROSSING OUTER CORDONS 7:00 A.M. – 7:00 P.M. 1979



NOTE: Subway and Commuter Rail Cars not included
METRO CORDON COUNT PROGRAM 1981

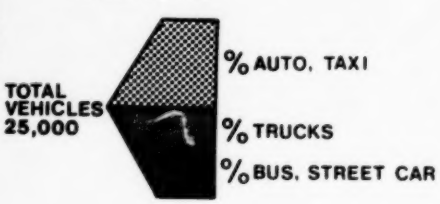
EXHIBIT 9B : VEHICLES CROSSING OUTER CORDONS 7:00 A.M. – 7:00 P.M. 1981





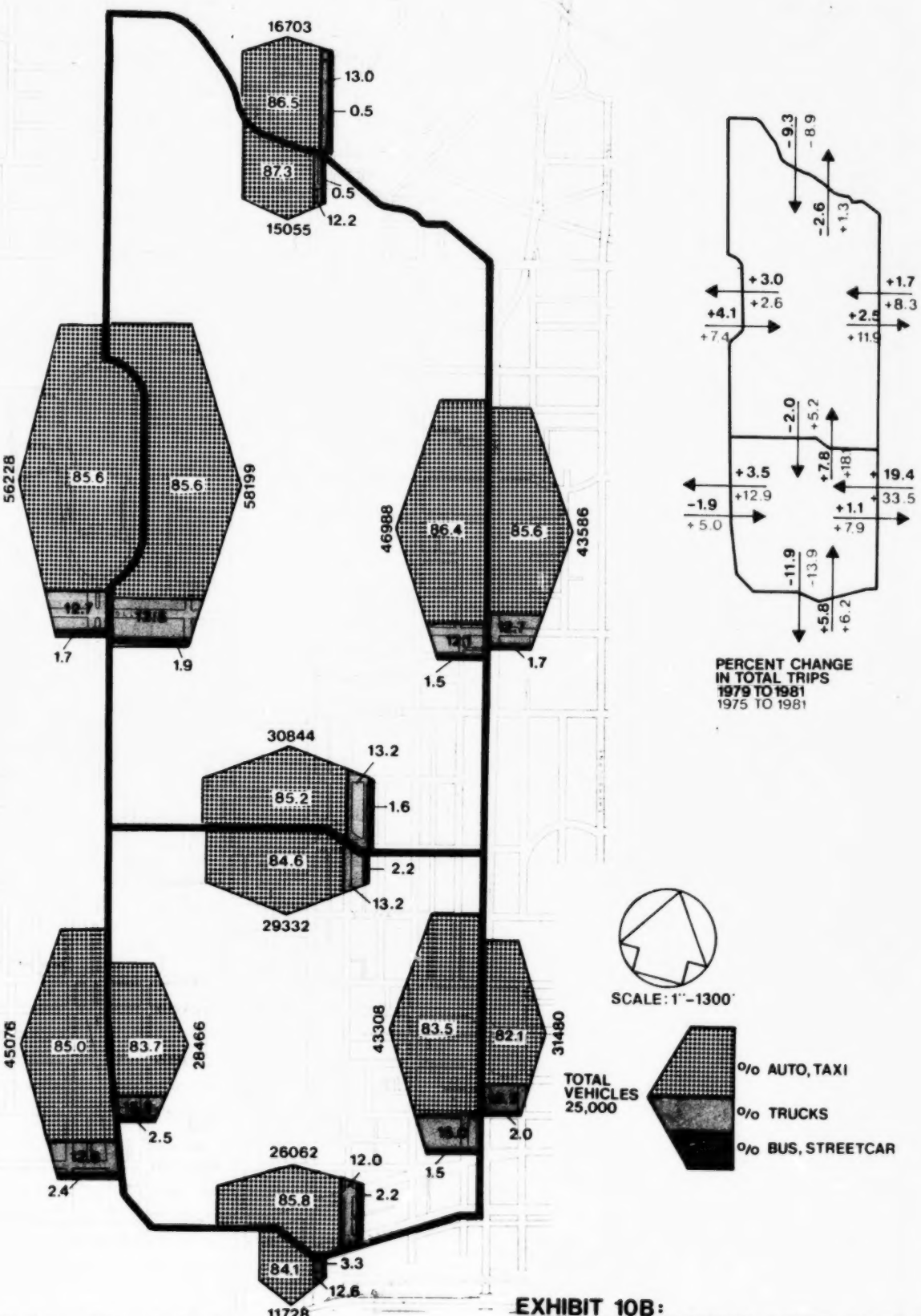
PERCENT CHANGE
IN TOTAL TRIPS
1977 TO 1979
1975 TO 1979

SCALE: 1"-1300'



NOTE: Subway & Commuter Rail Cars not included
METRO CORDON COUNT PROGRAM 1981

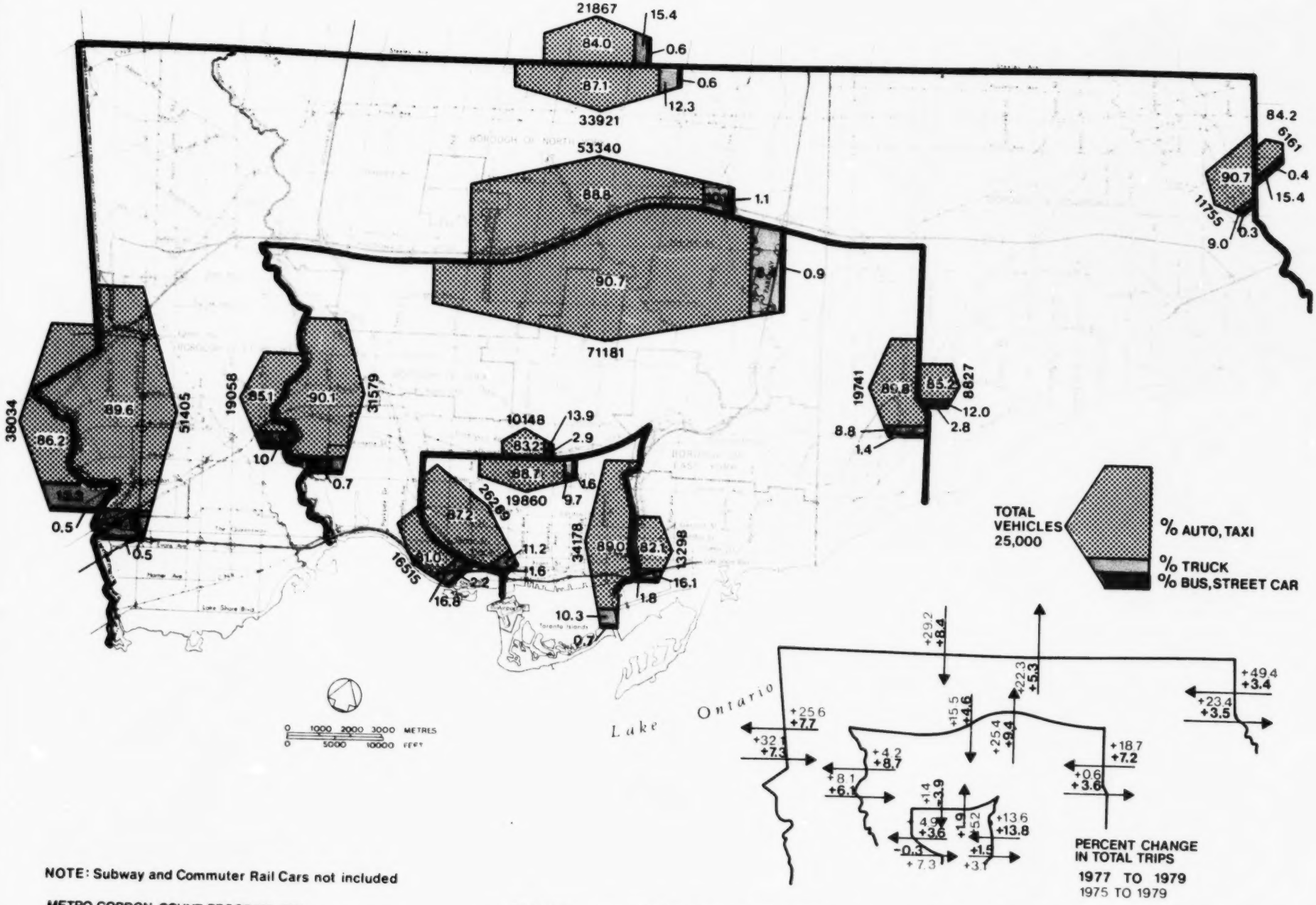
EXHIBIT 10A:
VEHICLES CROSSING INNER CORDONS 7:00 A.M. - 7:00 P.M. 1979



NOTE: Subway & Commuter Rail Cars not included

METRO CORDON COUNT PROGRAM 1981

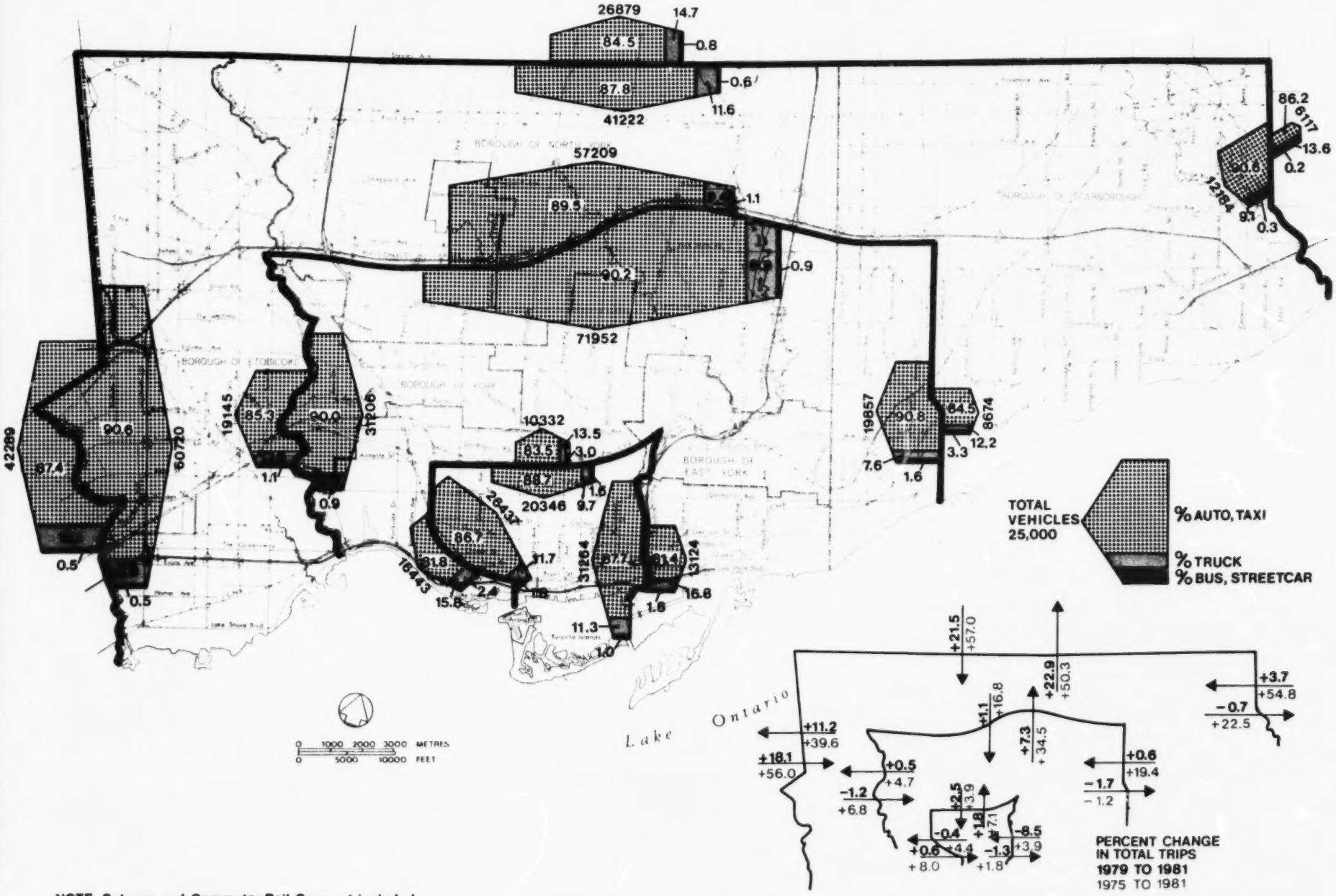
EXHIBIT 10B:
VEHICLES CROSSING INNER CORDONS
7:00 A.M.–7:00 P.M. 1981



NOTE: Subway and Commuter Rail Cars not included

METRO CORDON COUNT PROGRAM 1981

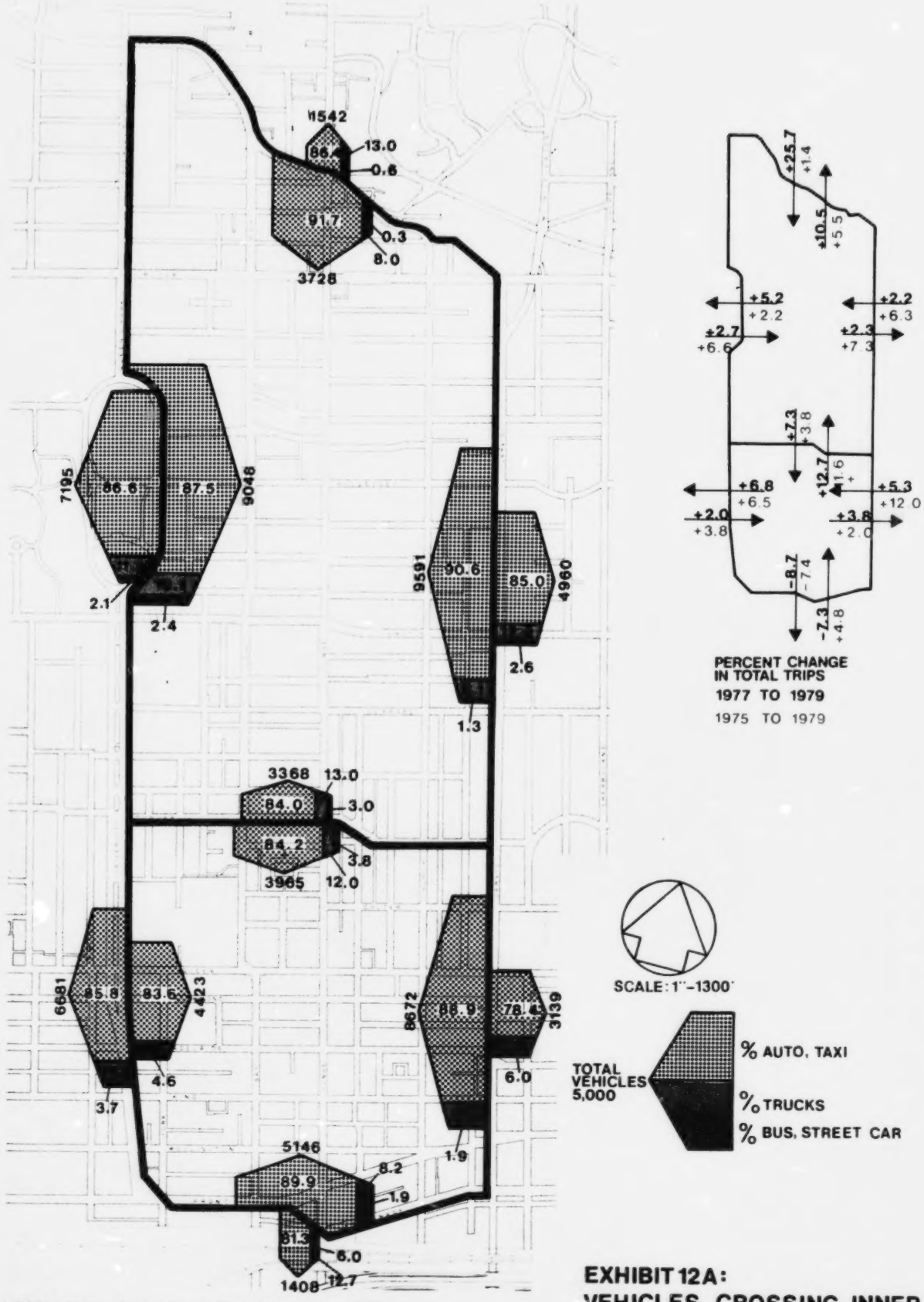
EXHIBIT 11A: VEHICLES CROSSING OUTER CORDONS 7:00 – 9:00 A.M. 1979



NOTE: Subway and Commuter Rail Cars not included

METRO CORDON COUNT PROGRAM 1981

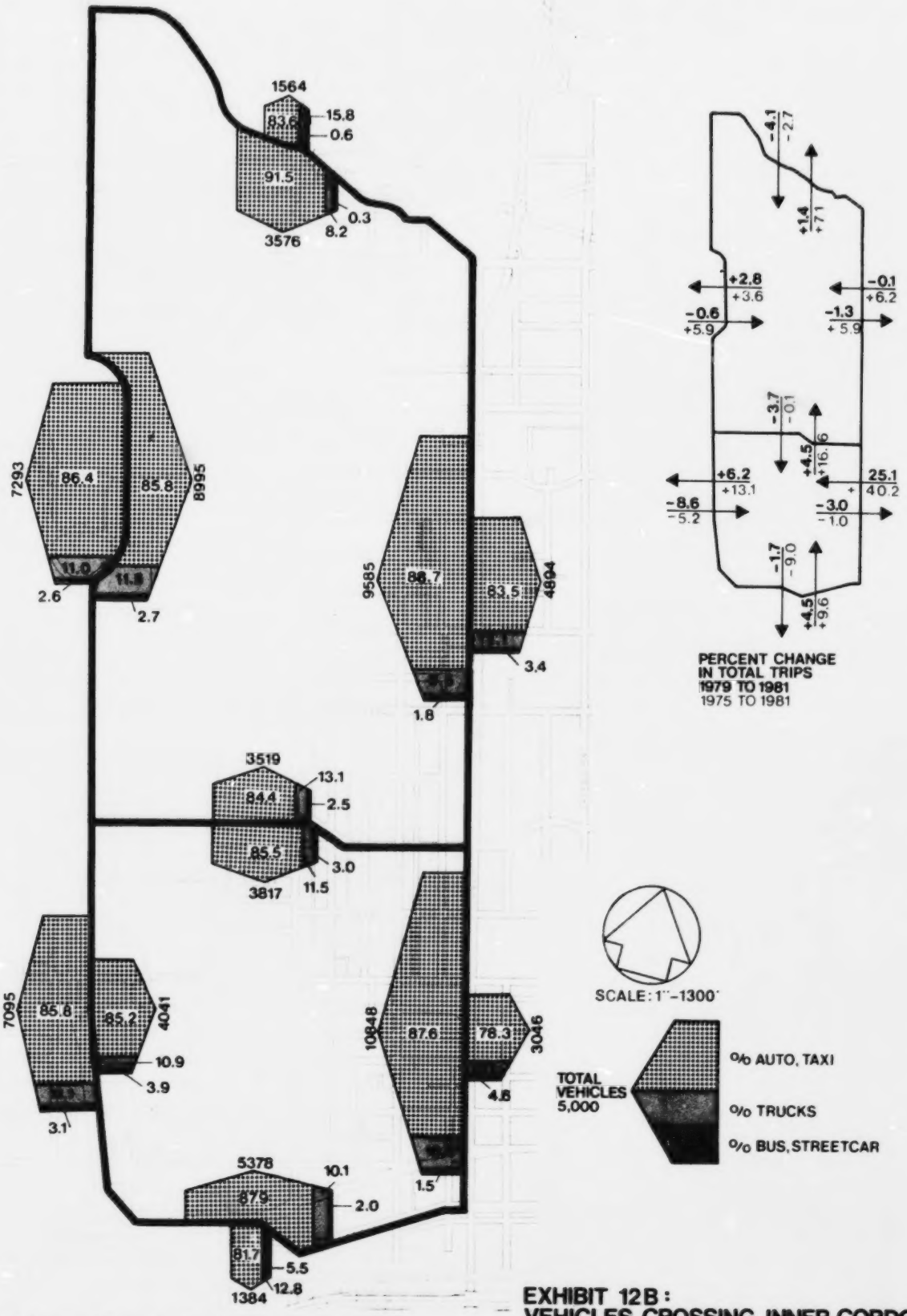
EXHIBIT 11B: VEHICLES CROSSING OUTER CORDONS 7:00–9:00 A.M. 1981



PERCENT CHANGE IN TOTAL TRIPS
1977 TO 1979
1975 TO 1979

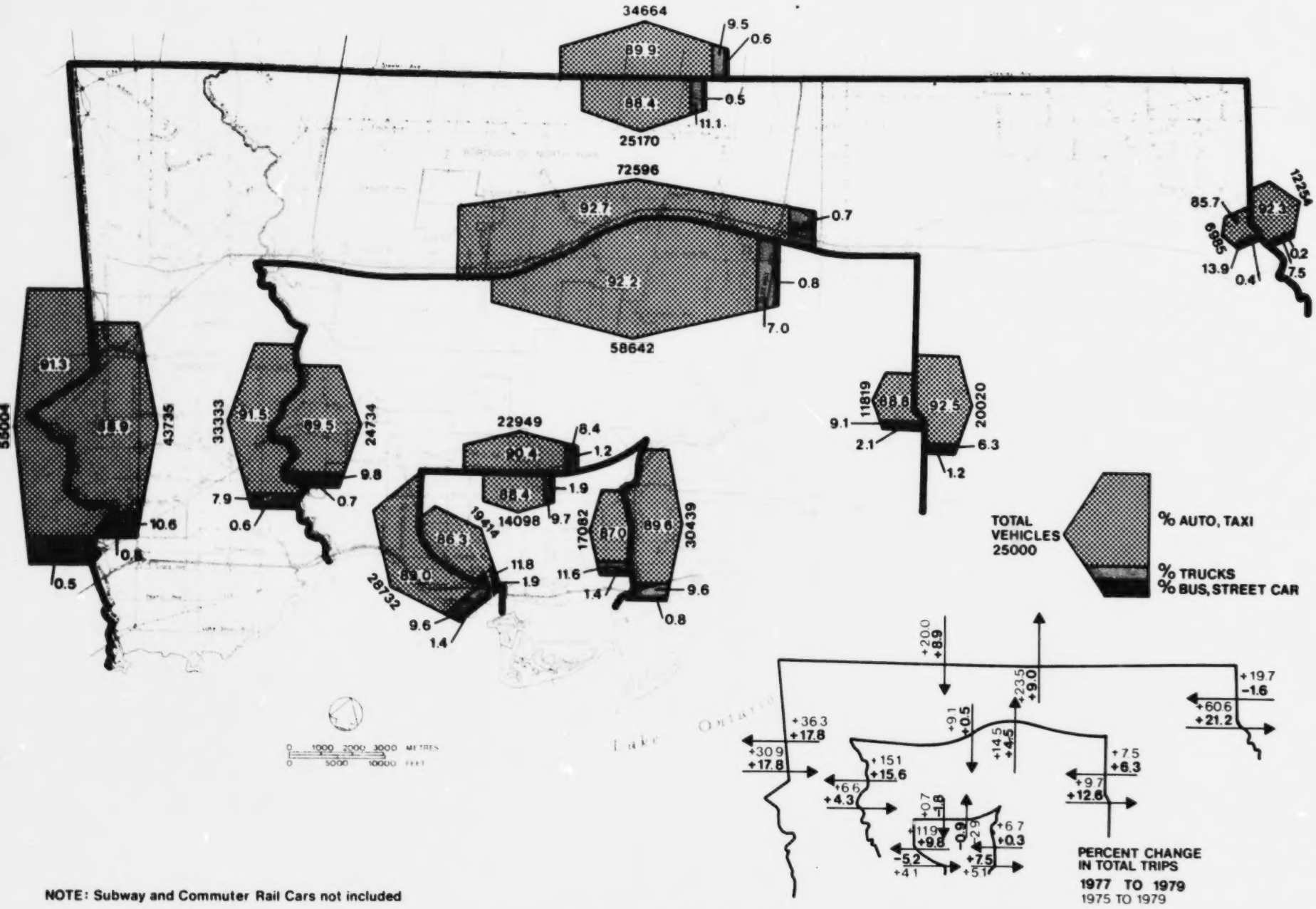
NOTE: Subway & Commuter Rail Cars not included
METRO CORDON COUNT PROGRAM 1981

EXHIBIT 12A:
VEHICLES CROSSING INNER CORDONS 7:00 – 9:00 A.M. 1979



NOTE : Subway and Commuter Rail Car not included
METRO CORDON COUNT PROGRAM 1981

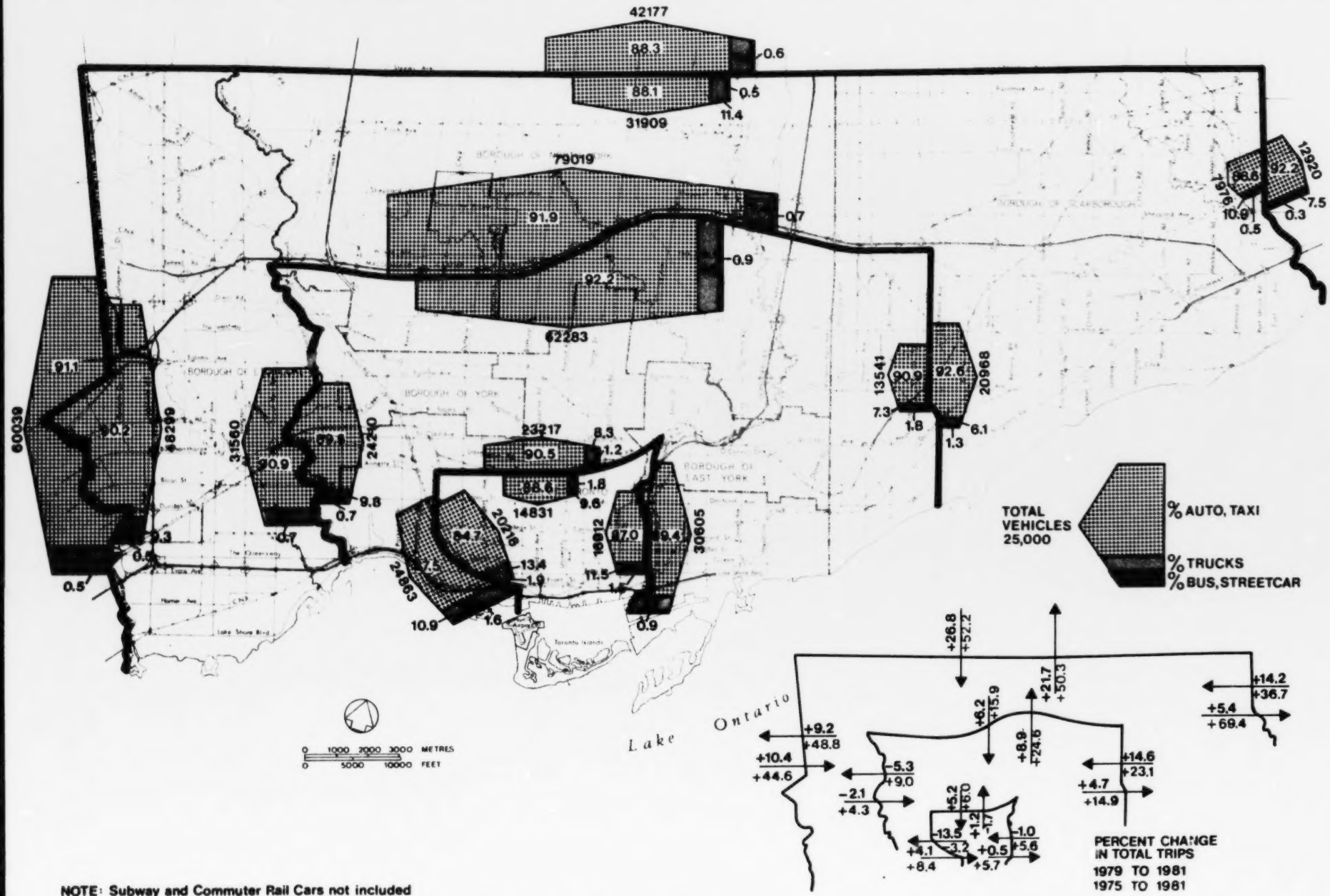
EXHIBIT 12B :
VEHICLES CROSSING INNER CORDONS
7:00 – 9:00 A.M. 1981



NOTE: Subway and Commuter Rail Cars not included

METRO CORDON COUNT PROGRAM 1981

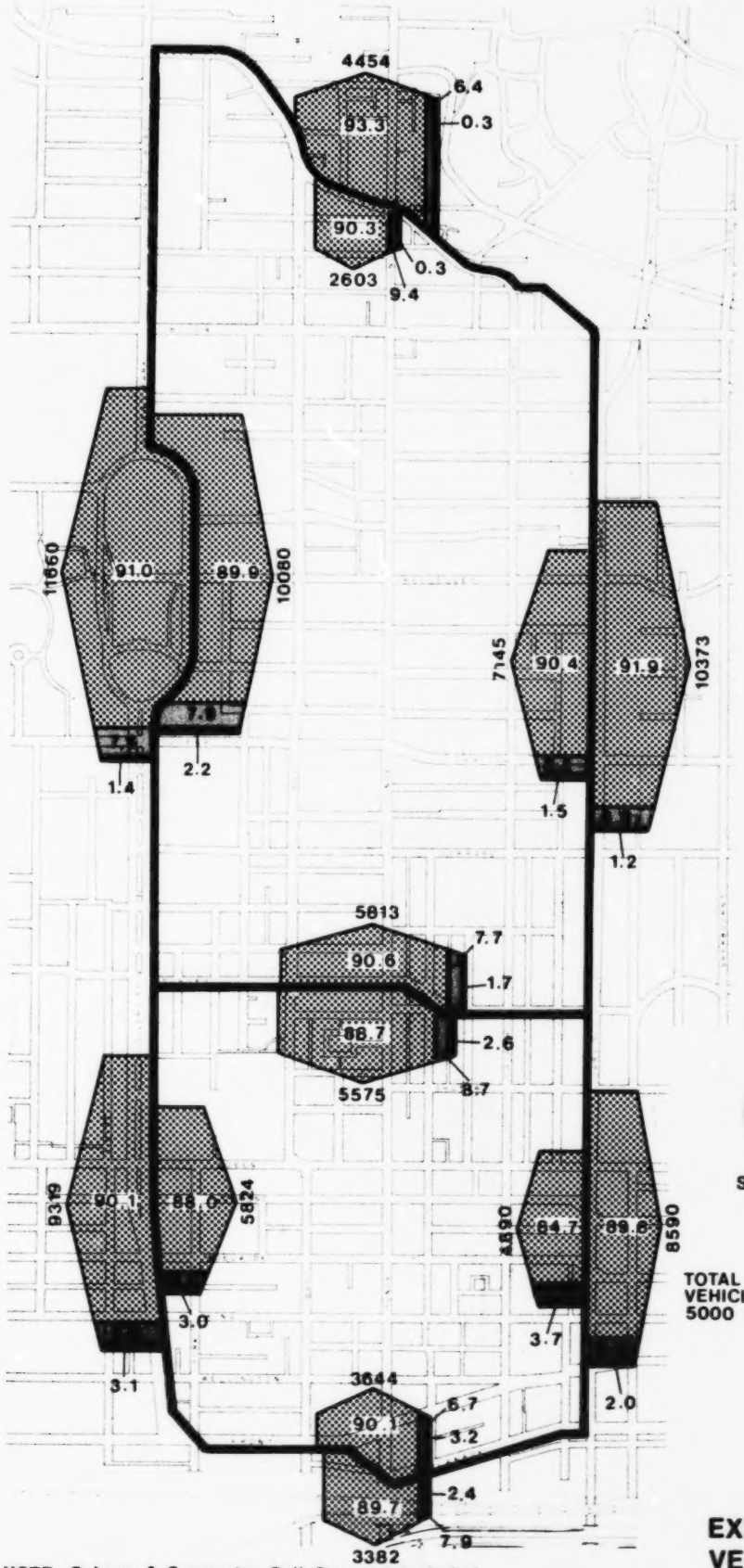
EXHIBIT 13A: VEHICLES CROSSING OUTER CORDONS 4:00 – 6:00 P.M. 1979



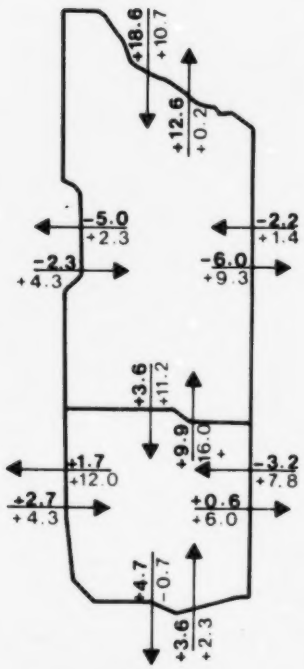
NOTE: Subway and Commuter Rail Cars not included

METRO CORDON COUNT PROGRAM 1981

EXHIBIT 13B: VEHICLES CROSSING OUTER CORDONS 4:00 - 6:00 P.M. 1981



NOTE: Subway & Commuter Rail Cars not included
METRO CORDON COUNT PROGRAM 1981



PERCENT CHANGE
IN TOTAL TRIPS
1977 TO 1979
1975 TO 1979

SCALE: 1"-1300'

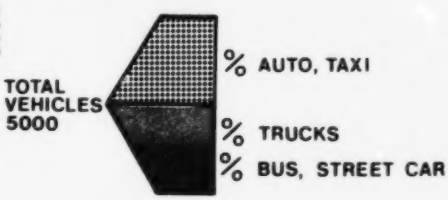
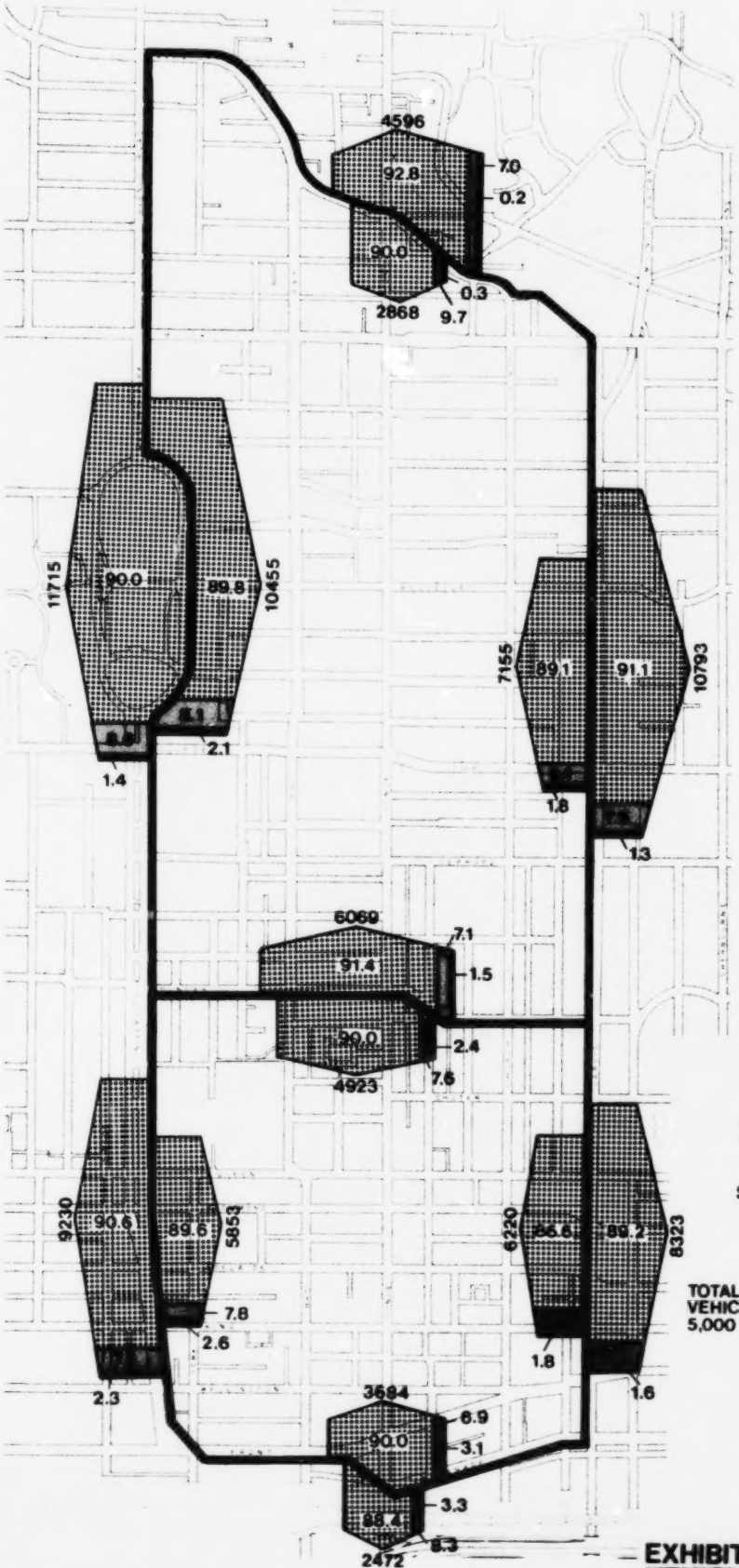
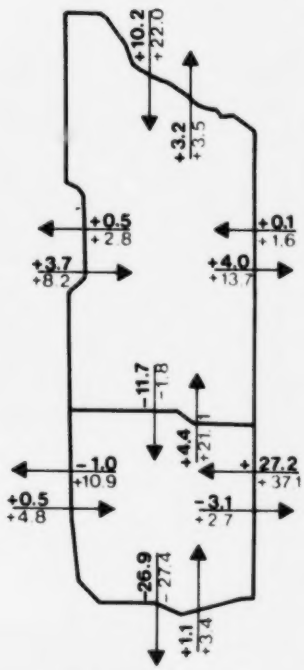


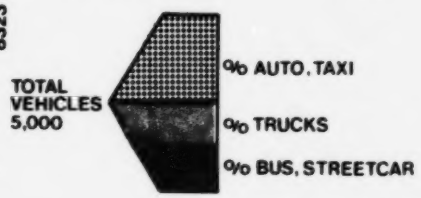
EXHIBIT 14A:
VEHICLES CROSSING INNER CORDONS 4:00-6:00 P.M. 1979





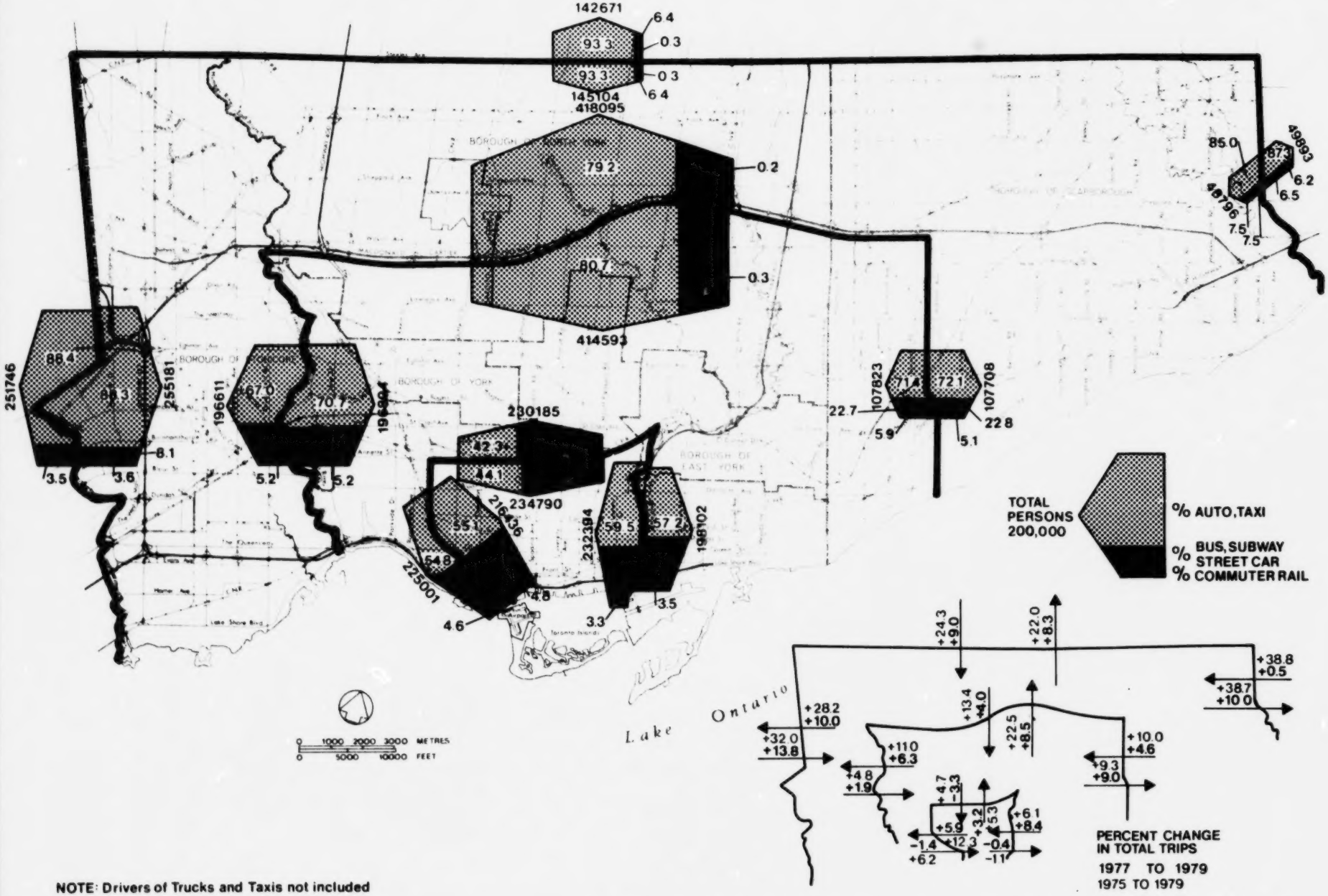
PERCENT CHANGE IN TOTAL TRIPS
1979 TO 1981
1975 TO 1981

SCALE: 1"–1300'



NOTE: Subway and Commuter Rail Cars not included
METRO CORDON COUNT PROGRAM 1981

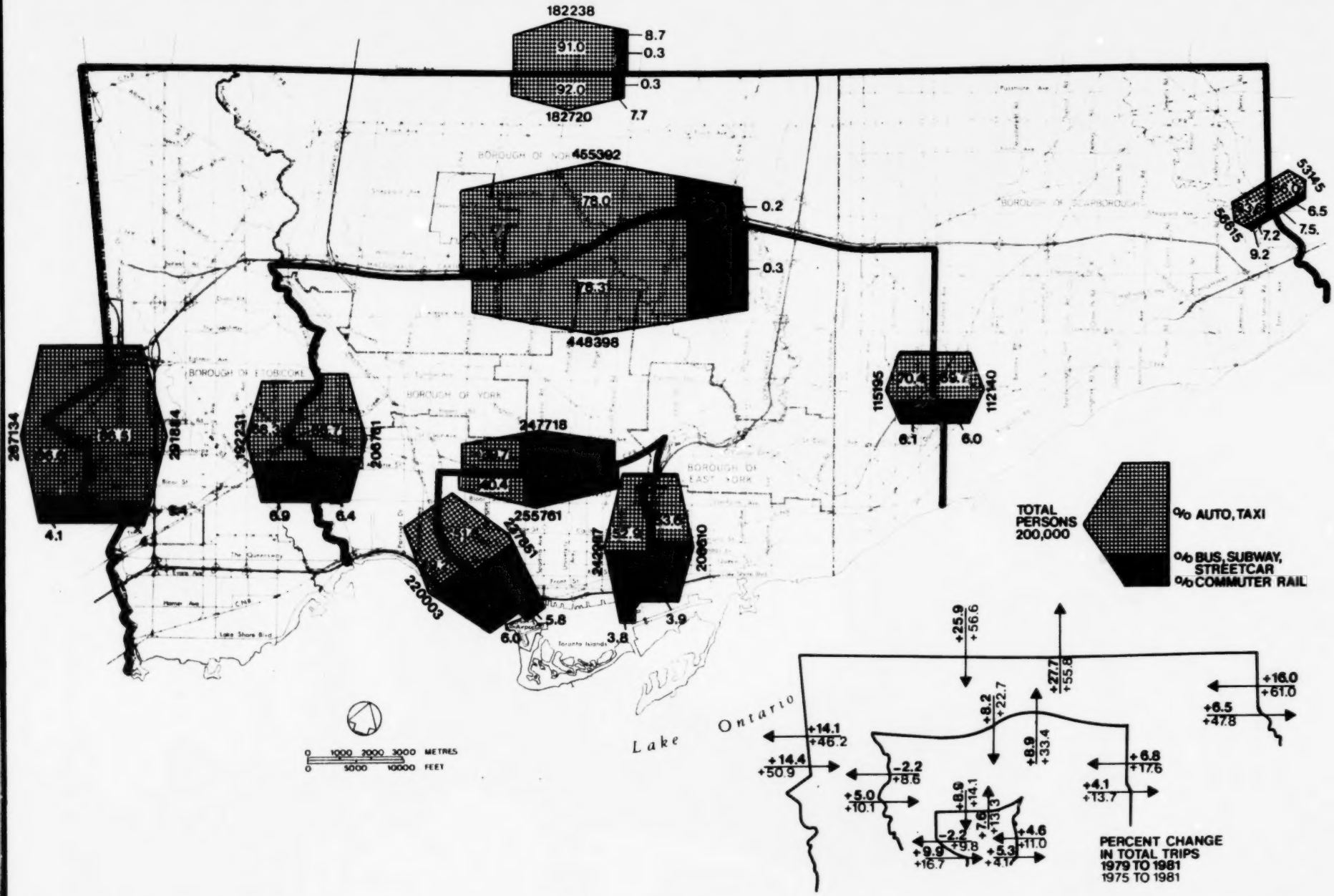
EXHIBIT 14B:
VEHICLES CROSSING INNER CORDONS
4:00–6:00 P.M. 1981



NOTE: Drivers of Trucks and Taxis not included

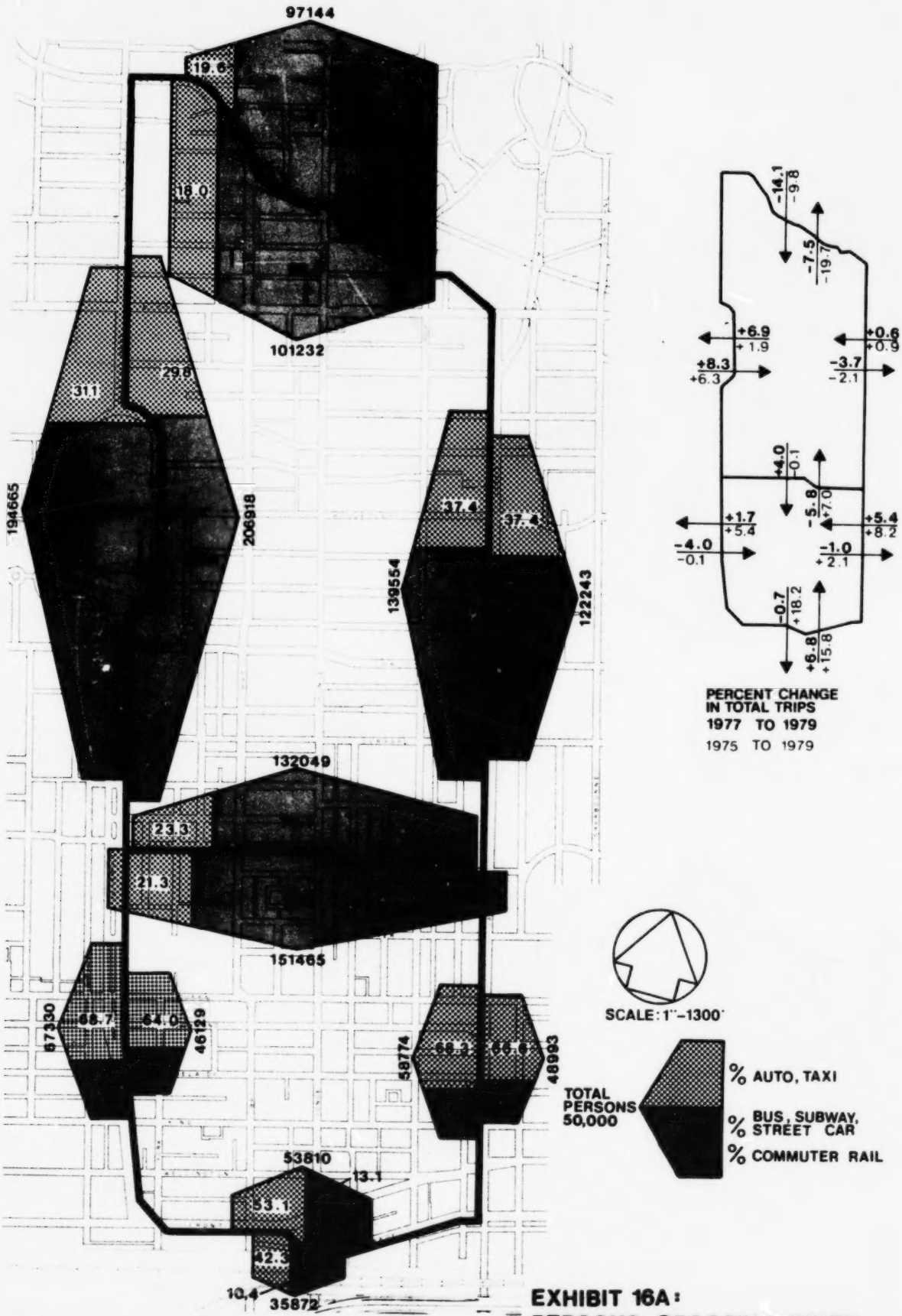
METRO CORDON COUNT PROGRAM 1981

EXHIBIT 15A: PERSONS CROSSING OUTER CORDONS 7:00 A.M. - 7:00 P.M. 1979



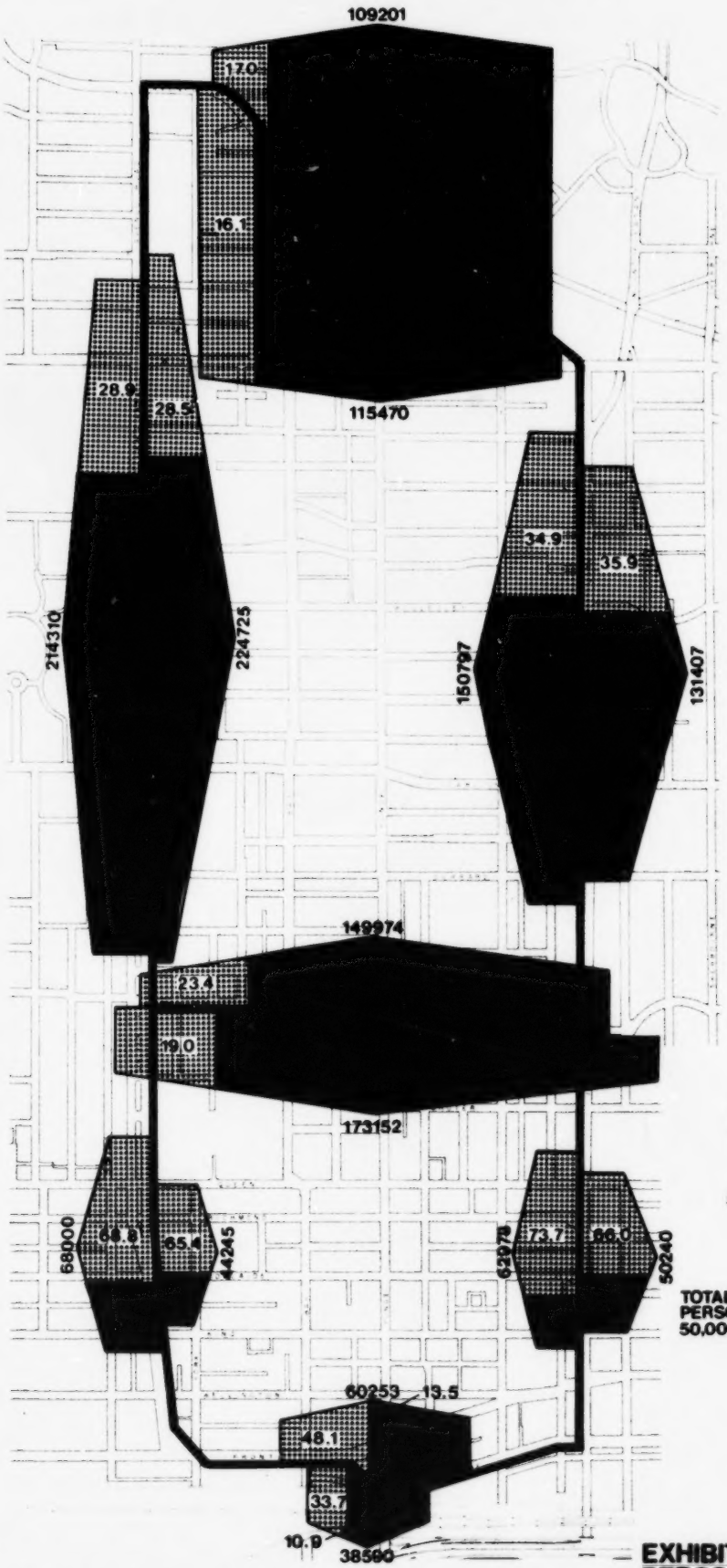
NOTE: Drivers of Trucks and Taxis not included
METRO CORDON COUNT PROGRAM 1981

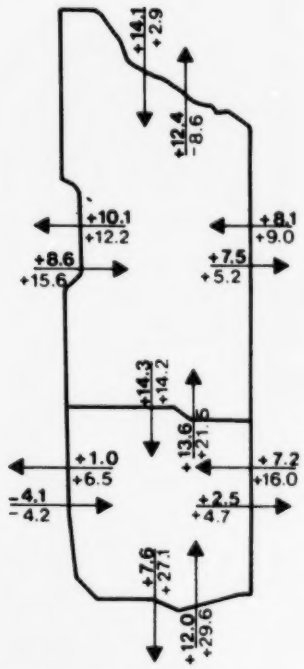
EXHIBIT 15B : PERSONS CROSSING OUTER CORDONS 7:00 A.M. – 7:00 P.M. 1981



NOTE: Drivers of Trucks and Taxis not included
METRO CORDON COUNT PROGRAM 1981

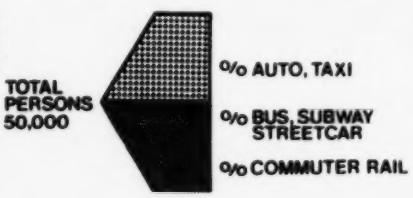
EXHIBIT 16A:
PERSONS CROSSING INNER CORDONS 7:00 A.M. - 7:00 P.M. 1979





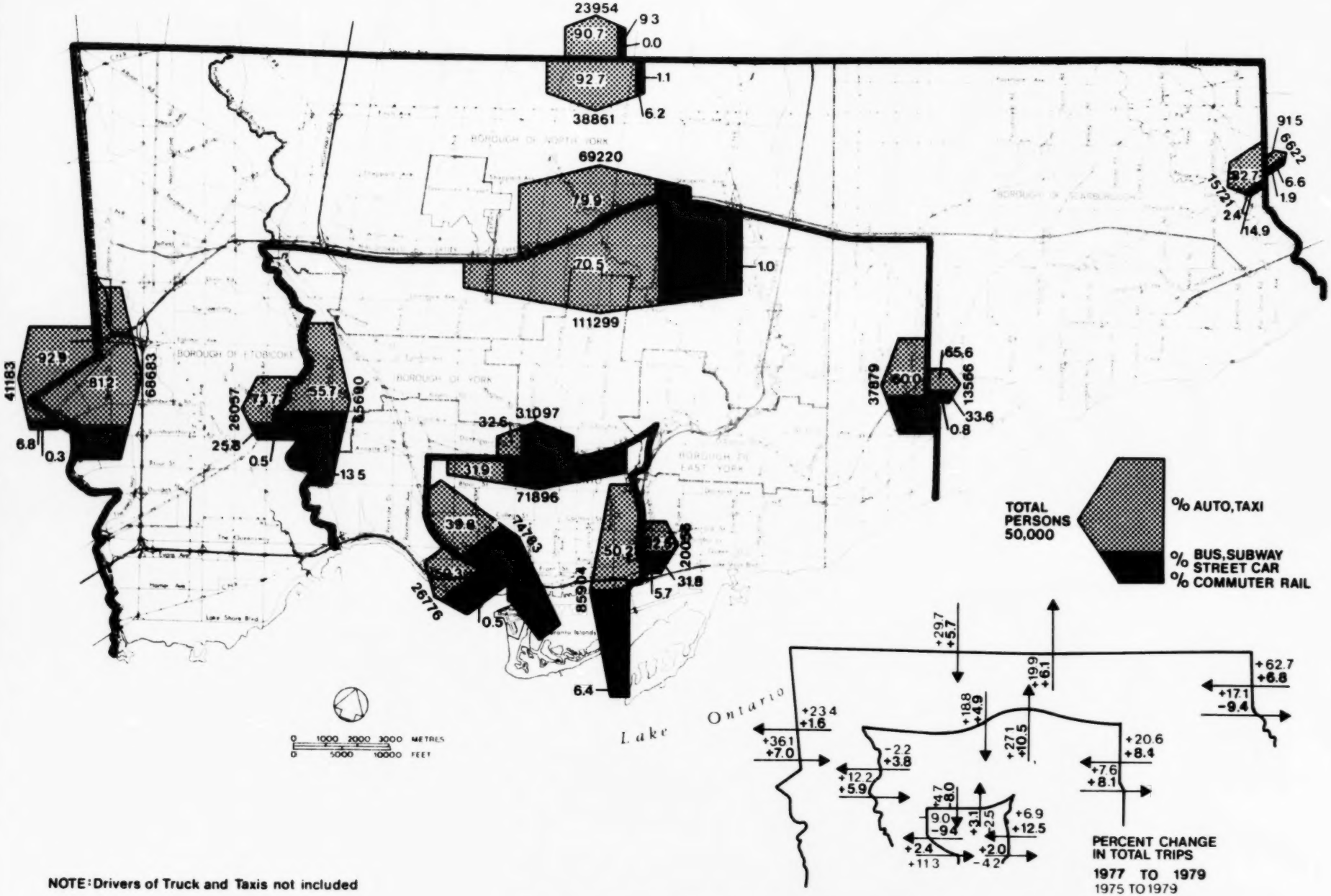
PERCENT CHANGE
IN TOTAL TRIPS
1979 TO 1981
1975 TO 1981

SCALE: 1"-1300'



NOTE: Drivers of Trucks and Taxis not included
METRO CORDON COUNT PROGRAM 1981

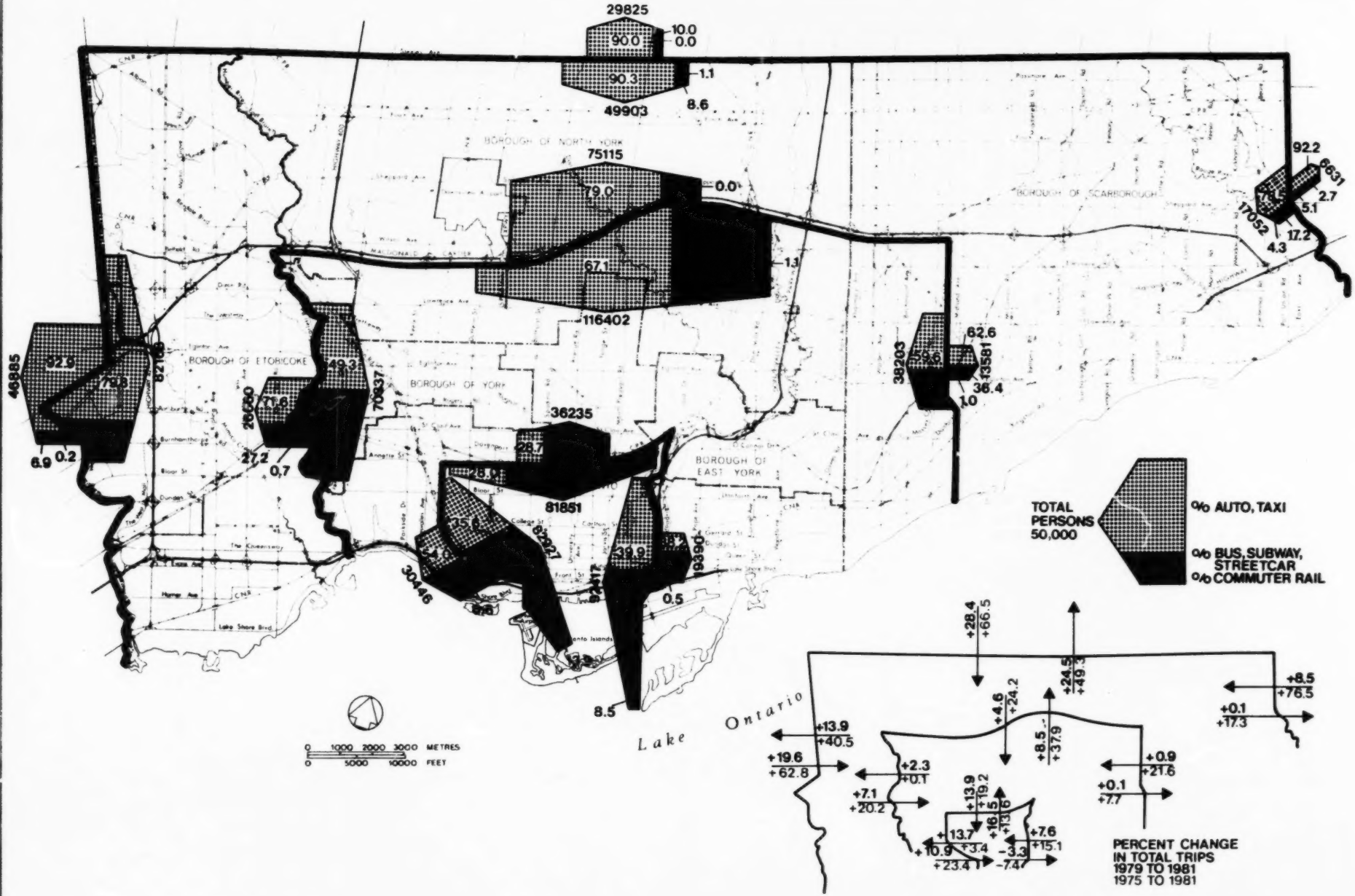
EXHIBIT 16B:
PERSONS CROSSING INNER CORDONS
7:00 A.M.-7:00 P.M. 1981



NOTE: Drivers of Truck and Taxis not included

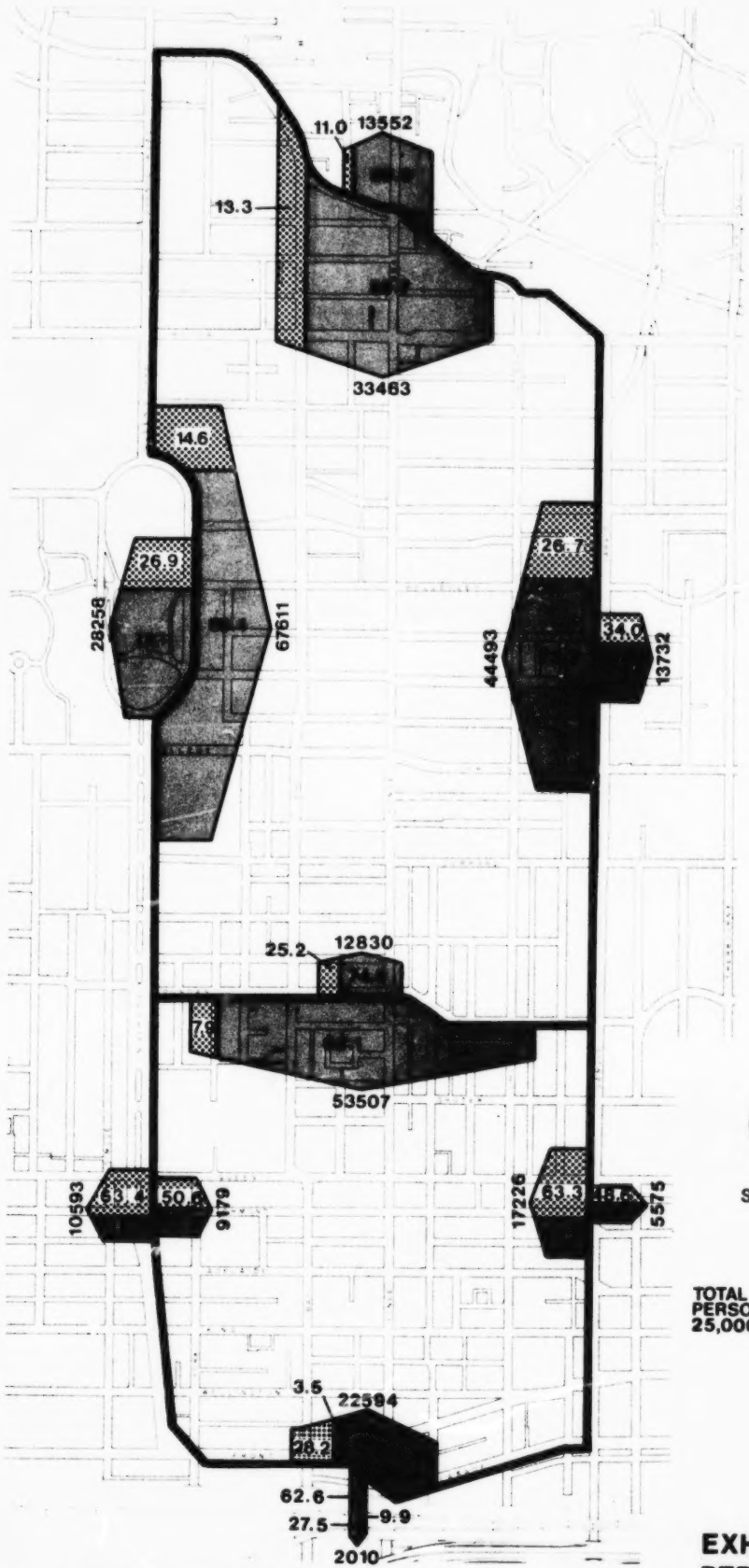
METRO CORDON COUNT PROGRAM 1981

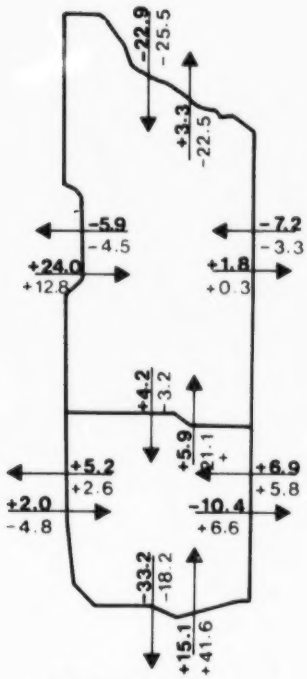
EXHIBIT 17A: PERSONS CROSSING OUTER CORDONS 7:00 - 9:00 A.M. 1979



NOTE: Drivers of Trucks and Taxis not included
METRO CORDON COUNT PROGRAM 1981

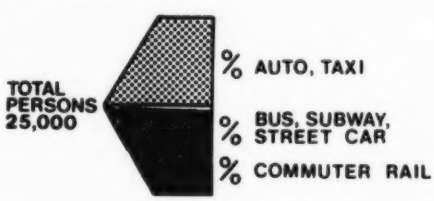
EXHIBIT 17B: PERSONS CROSSING OUTER CORDONS 7:00 – 9:00 A.M. 1981





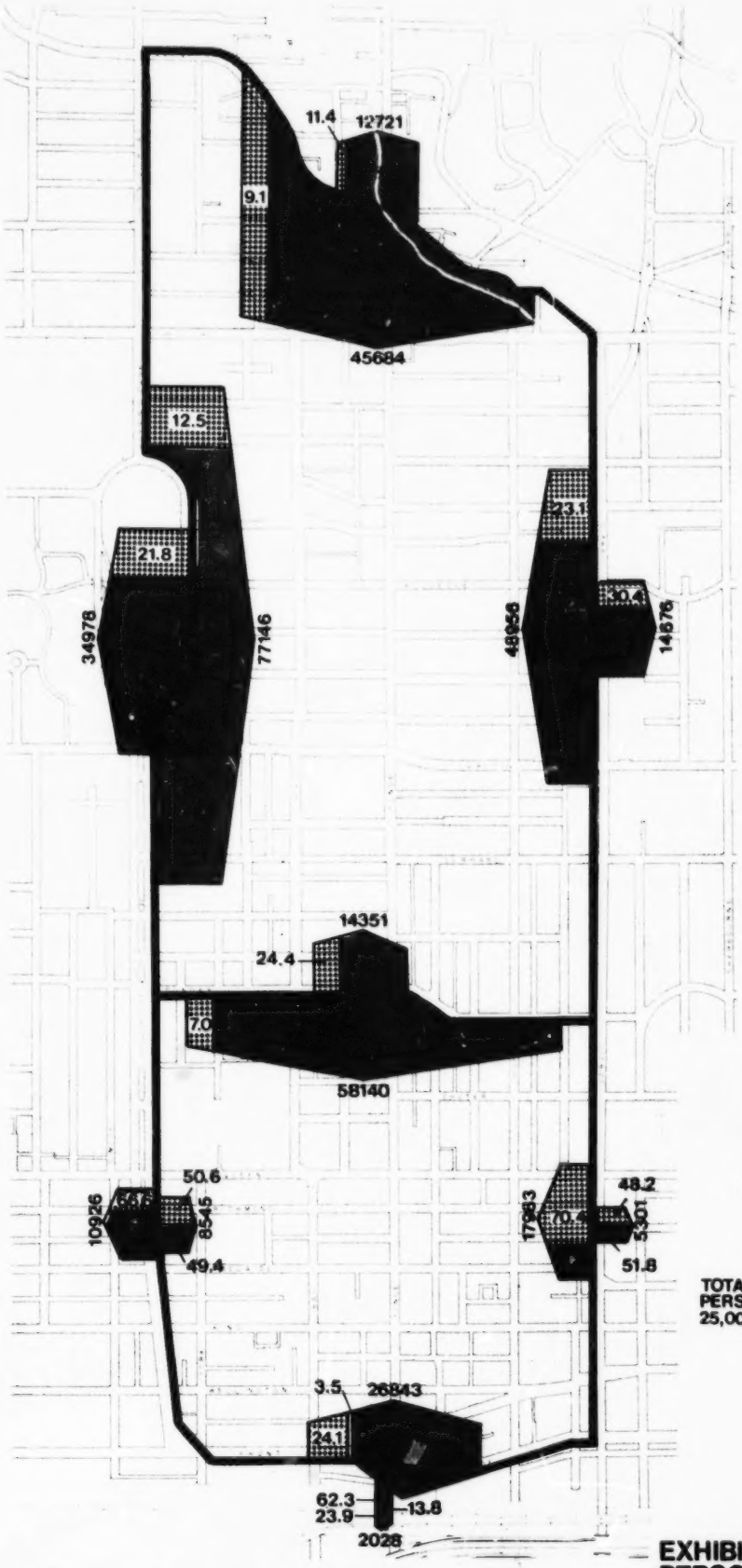
PERCENT CHANGE IN TOTAL TRIPS
1977 TO 1979
1975 TO 1979

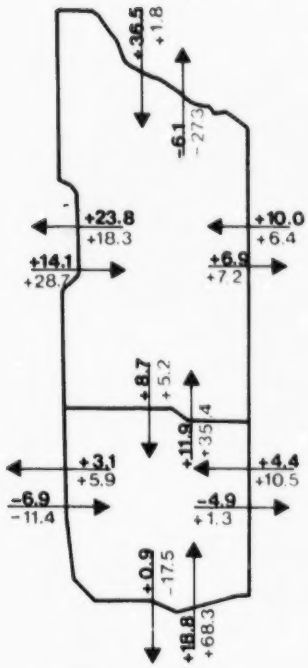
SCALE: 1"-1300'



NOTE: Drivers or Trucks and Taxis not included
METRO CORDON COUNT PROGRAM 1981

EXHIBIT 18A :
PERSONS CROSSING INNER CORDONS 7.00 - 9:00 A.M. 1979





PERCENT CHANGE
IN TOTAL TRIPS
1979 TO 1981
1975 TO 1981

SCALE: 1" = 1300'

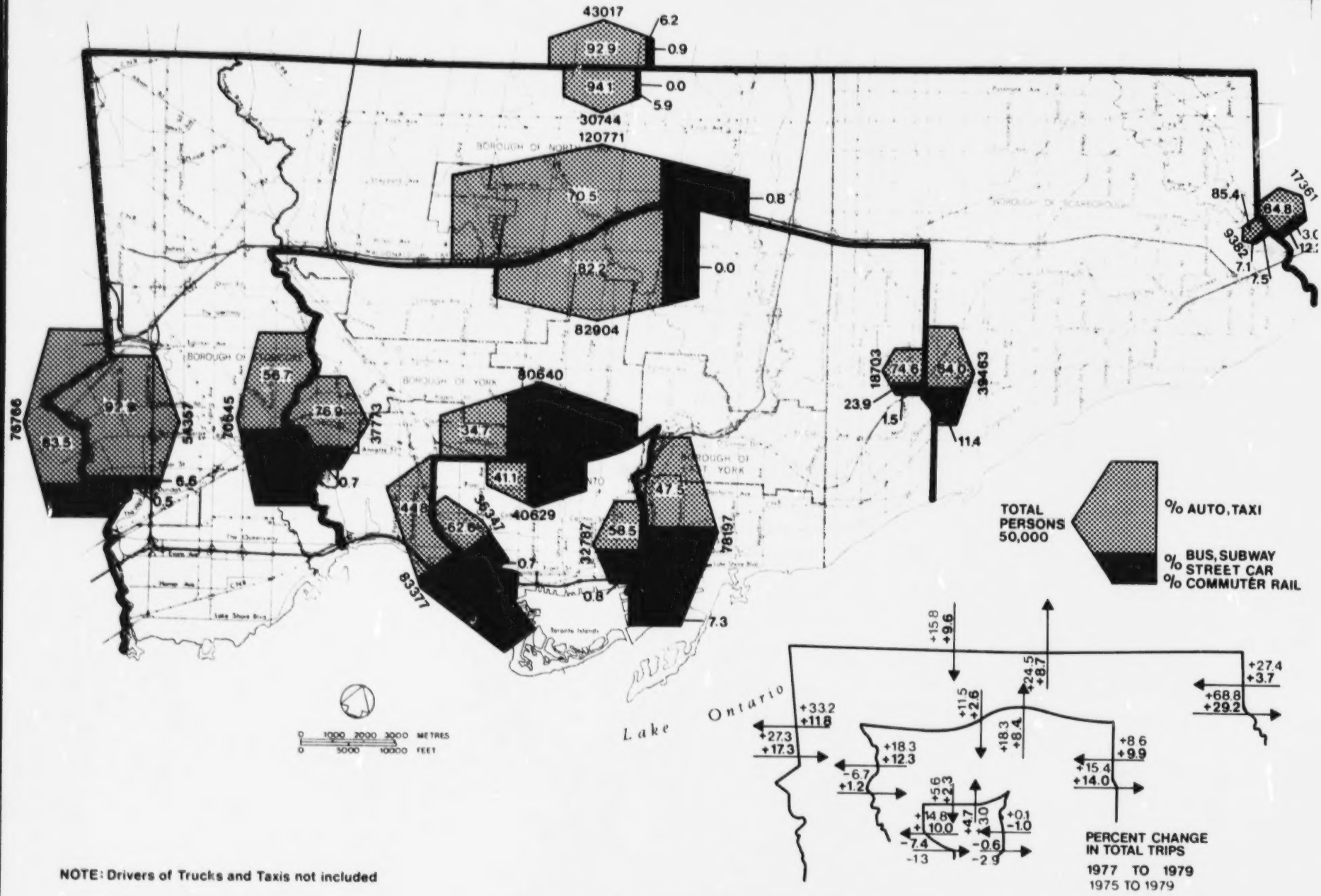
% AUTO, TAXI

% BUS, SUBWAY
STREETCAR

% COMMUTER RAIL

NOTE: Drivers of Trucks and Taxis not included
METRO CORDON COUNT PROGRAM 1981

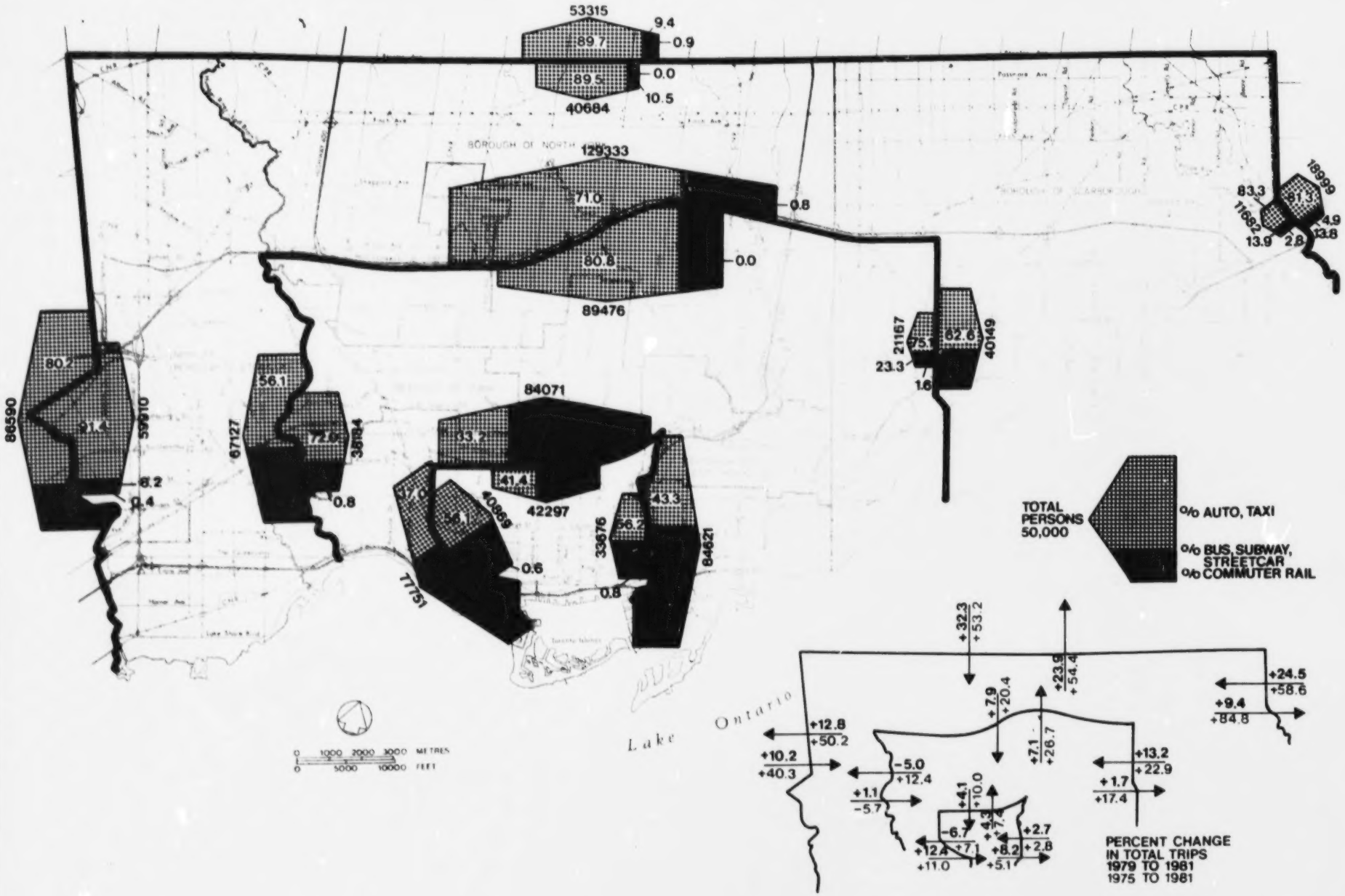
EXHIBIT 18B:
PERSONS CROSSING INNER CORDONS
7:00 – 9:00 A.M. 1981



NOTE: Drivers of Trucks and Taxis not included

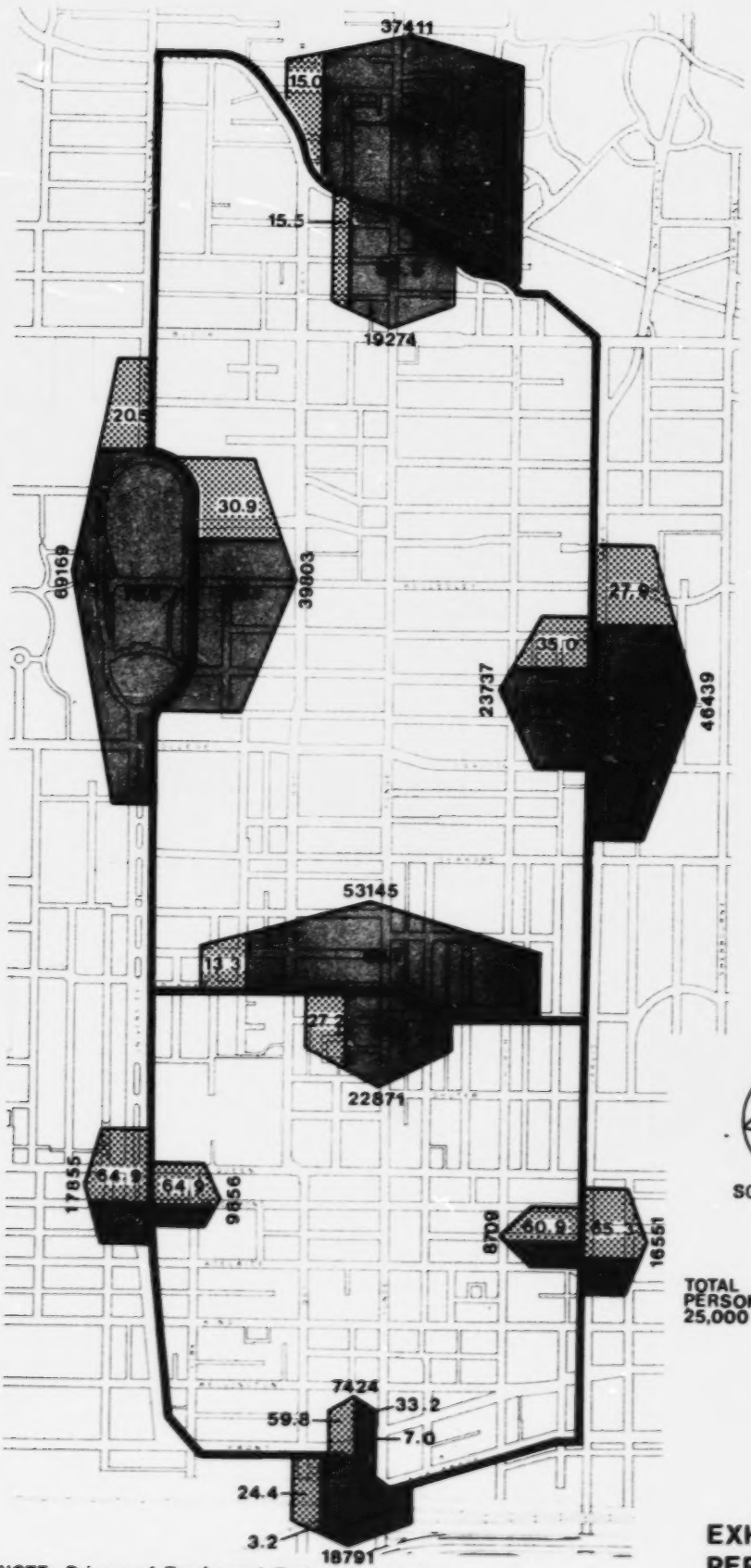
METRO CORDON COUNT PROGRAM 1981

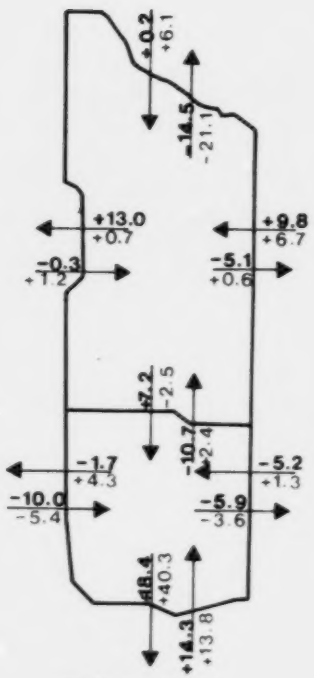
EXHIBIT 19A: PERSONS CROSSING OUTER CORDONS 4:00 – 6:00 P.M. 1979



NOTE: Drivers of Trucks and Taxis not included
METRO CORDON COUNT PROGRAM 1981

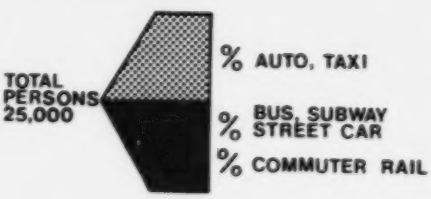
EXHIBIT 19B : PERSONS CROSSING OUTER CORDONS 4:00 – 6:00 P.M. 1981





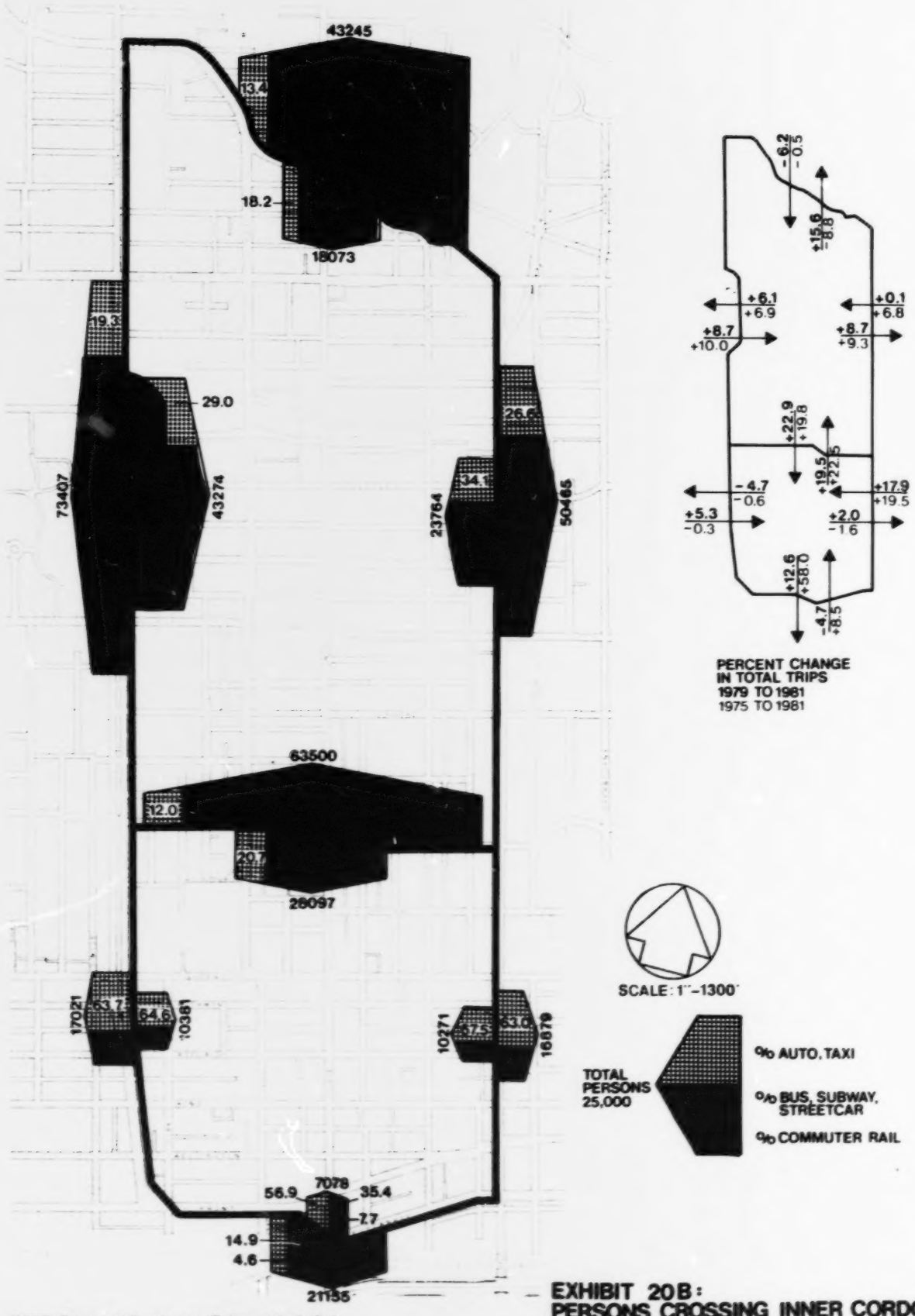
PERCENT CHANGE IN TOTAL TRIPS
1977 TO 1979
1975 TO 1979

SCALE: 1"-1300'



NOTE: Drivers of Trucks and Taxis not included
METRO CORDON COUNT PROGRAM 1981

EXHIBIT 20A:
PERSONS CROSSING INNER CORDONS 4:00-6:00P.M. 1979



PERCENT CHANGE IN TOTAL TRIPS
1979 TO 1981
1975 TO 1981

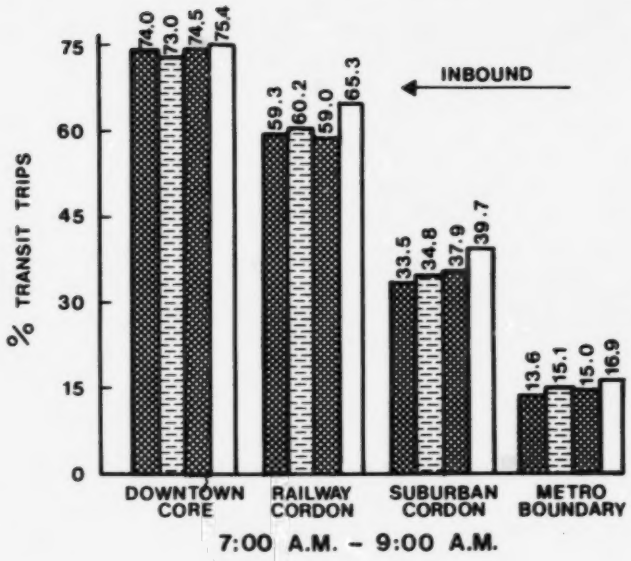
NOTE: Drivers of Trucks an Taxis not included
METRO CORDON COUNT PROGRAM 1981

EXHIBIT 20B:
PERSONS CROSSING INNER CORDONS
4:00-6:00 P.M. 1981

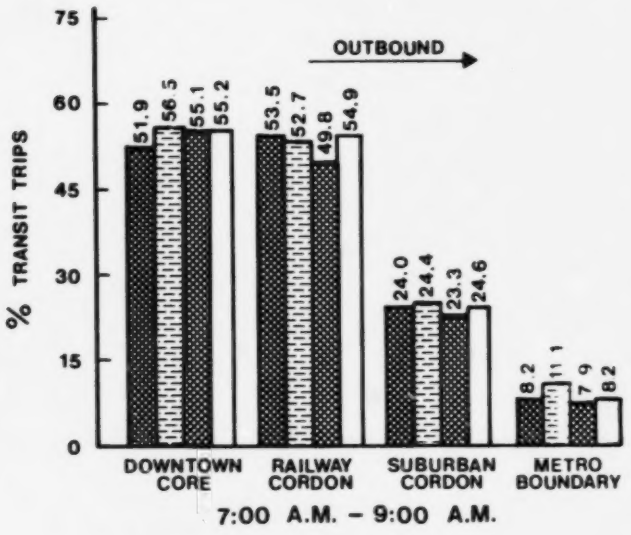
	Inbound				Outbound			
	1975	1977	1979	1981	1975	1977	1979	1981
Downtown Core								
7 a.m. - 9 a.m.	1.43	1.40	1.39	1.35	1.24	1.24	1.22	1.23
4 p.m. - 6 p.m.	1.44	1.44	1.39	1.34	1.50	1.50	1.47	1.44
7 a.m. - 7 p.m.	1.41	1.40	1.38	1.37	1.39	1.39	1.36	1.36
Railway								
7 a.m. - 9 a.m.	1.34	1.34	1.36	1.32	1.23	1.19	1.20	1.20
4 p.m. - 6 p.m.	1.38	1.39	1.36	1.35	1.38	1.38	1.40	1.35
7 a.m. - 7 p.m.	1.35	1.35	1.34	1.32	1.33	1.32	1.32	1.30
Suburban								
7 a.m. - 9 a.m.	1.28	1.27	1.25	1.23	1.21	1.19	1.18	1.17
4 p.m. - 6 p.m.	1.34	1.30	1.29	1.28	1.34	1.32	1.30	1.29
7 a.m. - 7 p.m.	1.31	1.30	1.28	1.26	1.31	1.29	1.28	1.26
Metro Boundary								
7 a.m. - 9 a.m.	1.24	1.24	1.22	1.22	1.24	1.23	1.18	1.18
4 p.m. - 6 p.m.	1.38	1.36	1.31	1.29	1.37	1.33	1.29	1.28
7 a.m. - 7 p.m.	1.33	1.33	1.29	1.27	1.35	1.32	1.27	1.28

Note: Taxis and Taxi Drivers excluded

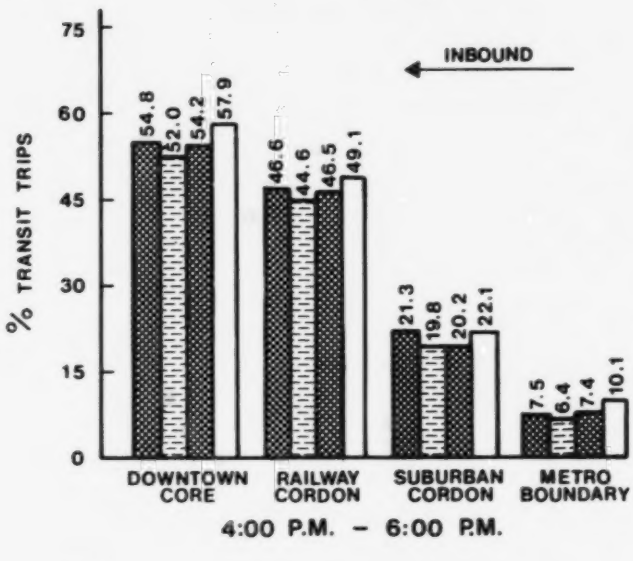
EXHIBIT 21:
AVERAGE AUTO OCCUPANCY AT 4 MAJOR CORDONS



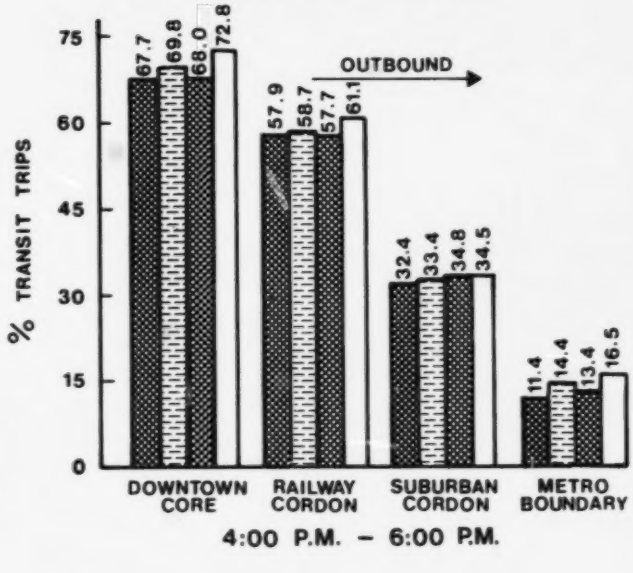
7:00 A.M. - 9:00 A.M.



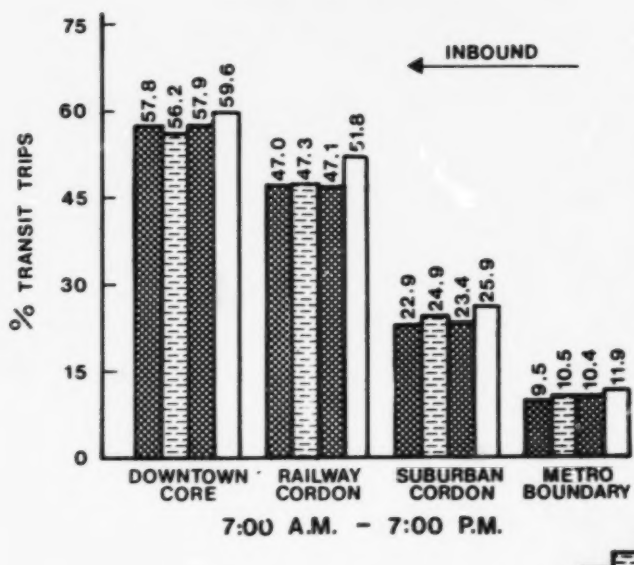
7:00 A.M. - 9:00 A.M.



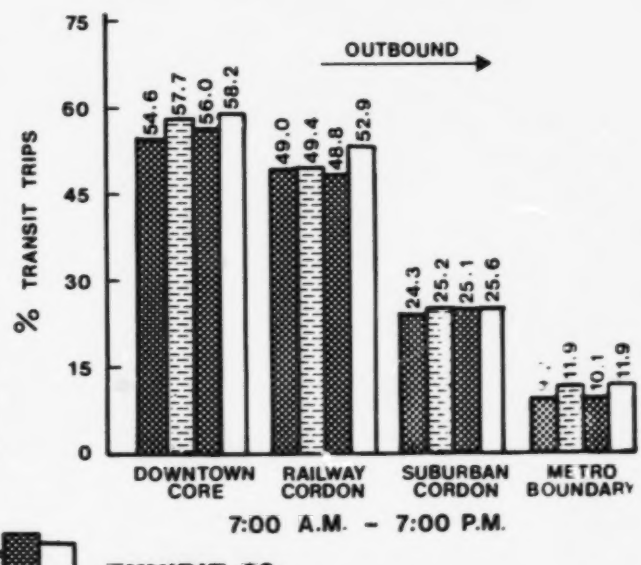
4:00 P.M. - 6:00 P.M.



4:00 P.M. - 6:00 P.M.



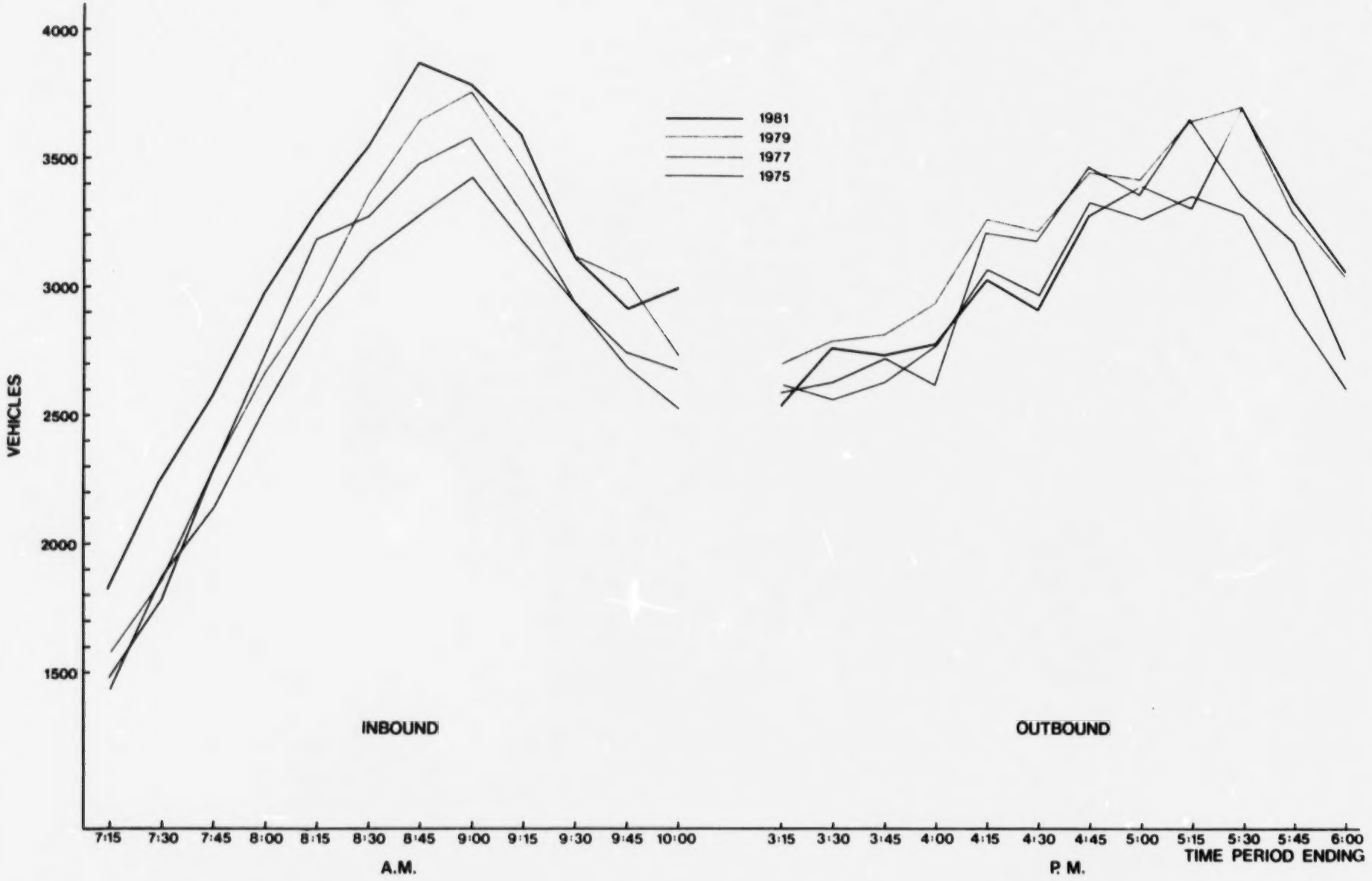
7:00 A.M. - 7:00 P.M.



7:00 A.M. - 7:00 P.M.

EXHIBIT 22:
MODAL SPLIT - 4 MAJOR CORDONS, 1975, 1977, 1979 AND 1981.

METRO CORDON COUNT PROGRAM 1981



METRO CORDON COUNT PROGRAM 1981

EXHIBIT 23:
DISTRIBUTION OF VEHICLES CROSSING THE DOWNTOWN CORDON

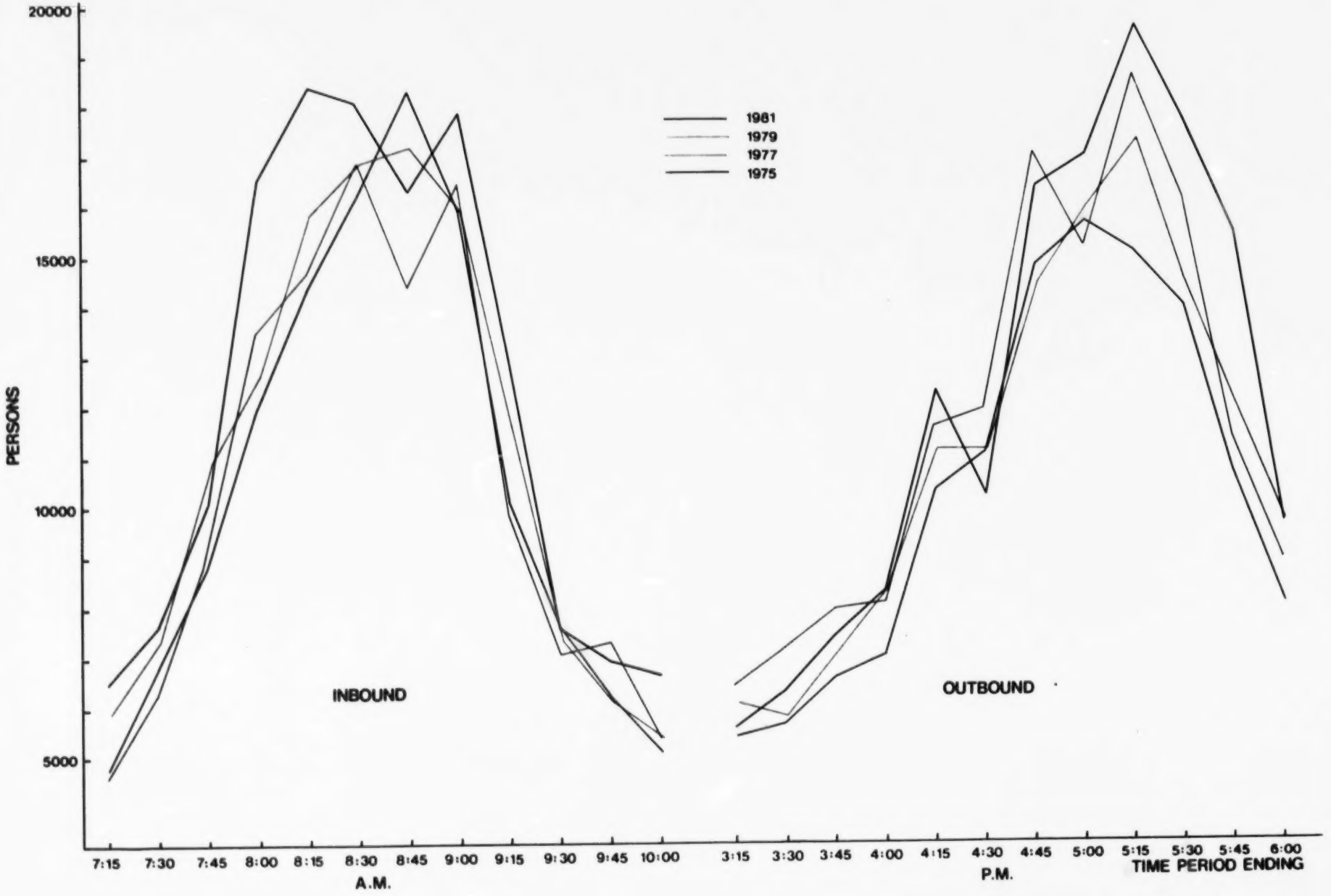
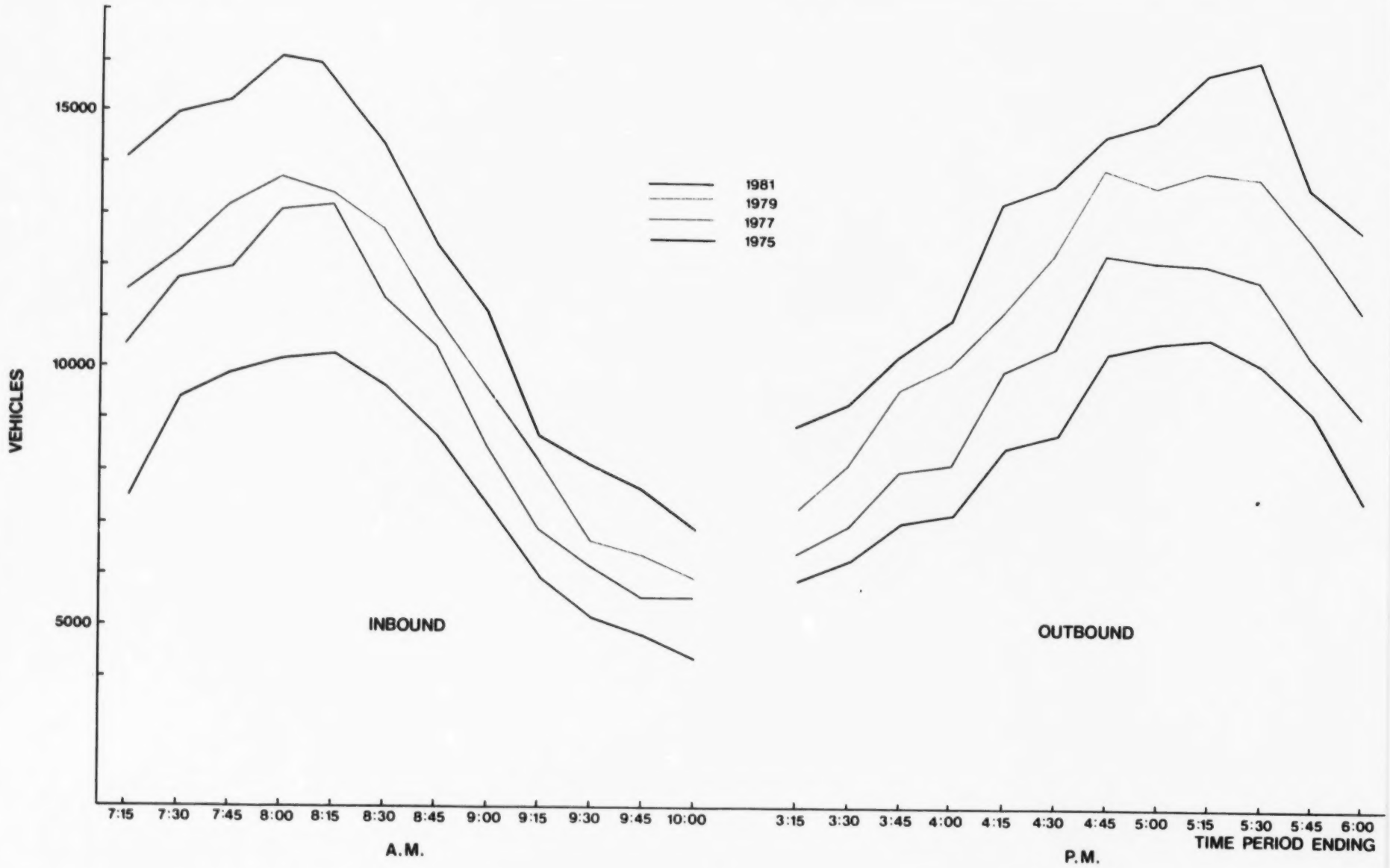


EXHIBIT 24:
DISTRIBUTION OF PERSONS CROSSING THE DOWNTOWN CORDON

METRO CORDON COUNT PROGRAM 1981



METRO CORDON COUNT PROGRAM 1981

EXHIBIT 25:
DISTRIBUTION OF VEHICLES CROSSING THE METRO BOUNDARY

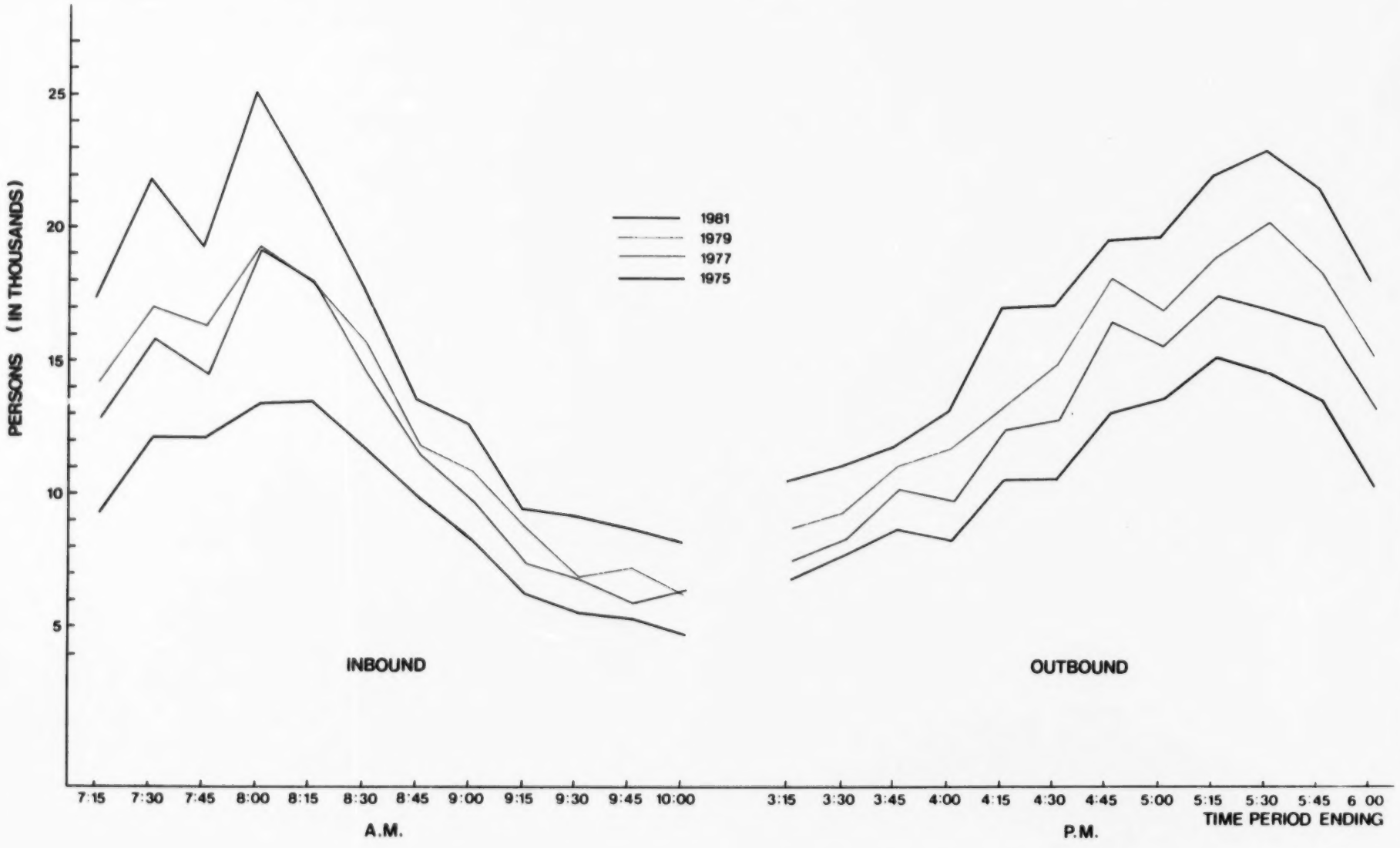


EXHIBIT 26 :
DISTRIBUTION OF PERSONS CROSSING THE METRO BOUNDARY

METRO CORDON COUNT PROGRAM 1981

EXHIBIT 27:
VEHICLE TRIPS CROSSING MAJOR SCREENLINES
(SEE EXHIBIT 1)

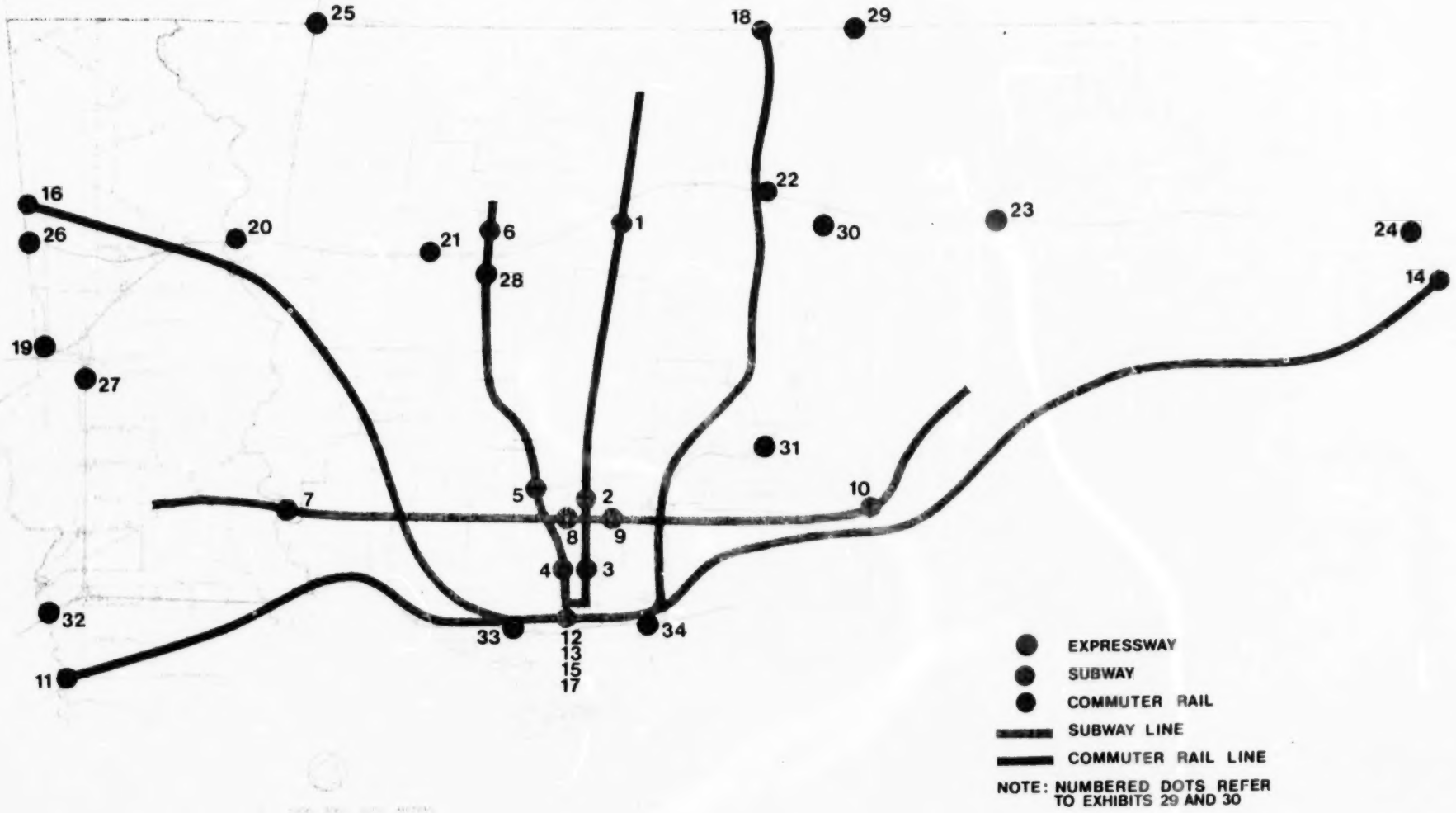
Screenline	A.M. Peak Period 7.00-9.00 (Inbound)					P.M. Peak Period 4.00-6.00 (Outbound)					7.00 A.M. - 7.00 P.M. (Two-way Totals)				
	Total Vehicles	2 year (6 year) % change	% Trucks	% Transit Vehicles	Aver. Auto Occup.	Total Vehicles	2 year (6 year) % change	% Trucks	% Transit Vehicles	Aver. Auto Occup.	Total Vehicles	2 year (6 year) % change	% Trucks	% Transit Vehicles	Aver. Auto Occup.
West Metro Bdy.															
1975	38,918		11.6	0.3	1.24	40,347		10.4	0.4	1.37	319,525		17.2	0.4	1.34
1977	47,928	23.2	10.2	0.4	1.24	46,696	15.7	9.5	0.5	1.35	363,607	13.8	16.8	0.5	1.33
1979	51,405	7.3	9.9	0.5	1.22	55,004	17.8	8.2	0.5	1.28	417,581	14.8	14.8	0.5	1.28
1981	60,720	18.1	8.9	0.5	1.20	60,039	9.2	8.3	0.6	1.28	470,996	12.8	13.7	0.6	1.25
		(56.0)					(48.8)					(47.4)			
Humber River															
1975	49,343		12.1	0.4	1.24	49,230		10.8	0.5	1.31	414,970		17.1	0.5	1.30
1977	52,214	5.8	12.0	0.4	1.25	51,420	4.4	11.0	0.4	1.33	434,436	4.7	16.9	0.5	1.31
1979	57,013	9.2	11.2	0.5	1.23	60,059	16.8	9.5	0.4	1.29	476,810	9.8	15.3	0.5	1.26
1981	58,374	2.4	11.4	0.7	1.21	60,936	1.5	9.7	0.6	1.29	492,151	3.2	15.4	0.7	1.26
		(18.3)					(23.8)					(18.6)			
Newmarket Sub.															
1975	54,679		12.6	1.1	1.28	60,138		10.3	1.1	1.33	511,321		16.9	1.2	1.30
1977	61,570	12.6	13.6	1.2	1.28	65,118	8.3	11.7	1.1	1.38	556,028	8.7	17.0	1.2	1.33
1979	60,718	1.4	14.1	1.3	1.28	68,418	5.1	10.7	1.1	1.37	564,154	1.5	16.6	1.3	1.30
1981	66,823	10.1	11.7	1.3	1.24	66,784	-2.4	10.9	1.2	1.29	586,154	3.9	15.7	1.4	1.26
		(22.2)					(11.1)					(14.6)			
Bala Sub.															
1975	65,956		10.4	0.8	1.28	65,723		8.8	0.8	1.33	531,306		15.3	0.9	1.30
1977	70,588	7.0	11.0	0.9	1.29	71,738	9.2	9.1	0.8	1.32	574,044	8.0	15.1	1.0	1.28
1979	77,680	10.0	9.6	0.8	1.30	75,279	4.9	7.9	0.6	1.29	614,639	7.1	13.9	1.0	1.27
1981	71,976	-7.3	9.7	0.9	1.26	73,462	-2.4	8.3	0.8	1.29	607,146	-1.2	13.9	1.1	1.26
		(9.1)					(11.8)					(14.3)			
Uxbridge Sub.															
1975	34,830		11.2	0.8	1.28	36,002		9.9	0.7	1.36	263,025		16.6	1.0	1.35
1977	40,375	15.9	9.8	0.8	1.27	39,421	9.5	8.5	0.6	1.29	287,337	9.2	15.9	0.9	1.31
1979	41,647	3.2	9.2	0.9	1.25	42,553	7.9	6.4	0.8	1.31	303,691	5.7	13.6	1.1	1.29
1981	45,148	8.4	8.8	1.0	1.25	45,624	7.2	7.1	0.8	1.27	337,136	11.0	13.3	1.2	1.28
		(29.6)					(26.7)					(28.2)			

EXHIBIT 27 (Continued)

Screenline	A.M. Peak Period 7.00-9.00 (Inbound) Total Vehicles	2 year (6 year) % change	% Trucks	% Transit Vehicles	Aver. Auto Occup.	P.M. Peak Period 4.00-6.00 (Outbound) Total Vehicles	2 year (6 year) % change	% Trucks	% Transit Vehicles	Aver. Auto Occup.	7.00 A.M. - 7.00 P.M. (Two-way Totals) Total Vehicles	2 year (6 year) % change	% Trucks	% Transit Vehicles	Aver. Auto Occup.
East Metro Bdy.															
1975	7,869		14.6	0.2	1.19	7,629		13.6	0.2	1.40	57,649		21.4	0.3	1.39
1977	11,366	44.4	12.3	0.3	1.24	10,113	32.6	12.1	0.1	1.31	73,166	26.9	20.4	0.5	1.39
1979	11,755	3.4	9.0	0.3	1.22	12,254	20.9	7.4	0.2	1.30	77,185	5.5	15.2	0.4	1.31
1981	12,184	3.6	9.0	0.3	1.21	12,920	5.4	7.4	0.3	1.30	83,932	8.7	14.7	0.4	1.31
		(54.8)					(69.4)					(45.6)			
Bathurst															
1975	23,552		9.8	1.4	1.37	27,211		7.8	1.2	1.42	207,883		14.7	1.5	1.35
1977	25,255	7.2	10.3	1.3	1.34	26,770	-1.6	8.3	1.2	1.42	210,503	1.3	14.6	1.5	1.35
1979	25,832	2.3	10.7	1.3	1.35	29,155	8.9	9.1	1.1	1.49	218,853	4.0	15.5	1.4	1.35
1981	24,715	-4.3	11.6	1.3	1.32	25,114	-13.9	10.5	1.3	1.36	215,578	-1.5	16.1	1.5	1.32
		(4.9)					(-7.7)					(3.7)			
Victoria Park															
1975	8,171		9.4	0.5	1.34	8,486		8.1	0.6	1.40	54,569		13.0	0.9	1.39
1977	7,953	-2.7	10.2	0.6	1.32	9,202	8.4	9.9	0.5	1.33	55,781	2.2	13.8	0.9	1.37
1979	8,615	8.3	11.5	0.8	1.29	8,912	3.2	10.4	0.4	1.38	57,887	3.8	14.8	1.0	1.35
1981	9,198	6.8	11.2	0.7	1.32	8,786	-1.4	11.8	0.5	1.39	59,255	2.4	15.0	1.0	1.35
		(12.6)					(3.5)					(8.6)			
North Metro															
1975	26,242		14.8	0.4	1.25	28,073		15.2	0.4	1.38	204,148		19.4	0.4	1.34
1977	31,279	19.2	14.1	0.6	1.24	31,789	13.2	12.1	0.6	1.31	233,918	14.6	18.5	0.6	1.30
1979	33,921	8.4	12.3	0.6	1.22	34,664	9.0	9.5	0.5	1.28	254,150	8.6	16.2	0.6	1.28
1981	41,222	21.5	11.5	0.6	1.25	42,177	21.7	11.1	0.5	1.29	316,125	24.4	16.2	0.6	1.28
		(57.1)					(50.2)					(54.9)			
Hwy. 401 North															
1975	86,922		13.9	0.7	1.24	88,169		11.5	0.7	1.34	775,980		16.7	0.8	1.31
1977	89,484	2.9	11.8	0.9	1.23	95,094	7.9	9.4	0.7	1.31	818,229	5.4	14.8	0.9	1.29
1979	92,753	3.7	10.3	0.9	1.21	101,039	6.3	8.1	0.7	1.27	870,260	6.4	13.1	0.9	1.26
1981	99,805	7.6	11.4	0.9	1.20	109,435	8.3	8.9	0.7	1.27	929,335	6.8	13.2	0.9	1.25
		(14.8)					(24.1)					(19.8)			

EXHIBIT 27 (Continued)

Screenline	A.M. Peak Period 7.00-9.00 (Inbound)					P.M. Peak Period 4.00-6.00 (Outbound)					7.00 A.M. - 7.00 P.M. (Two-way Totals)				
	Total Vehicles	2 year (6 year) % change	% Trucks	% Transit Vehicles	Aver. Auto Occup.	Total Vehicles	2 year (6 year) % change	% Trucks	% Transit Vehicles	Aver. Auto Occup.	Total Vehicles	2 year (6 year) % change	% Trucks	% Transit Vehicles	Aver. Auto Occup.
Hwy. 401 South															
1975	92,100		12.8	0.7	1.24	95,137		10.7	0.5	1.33	835,118		16.0	0.7	1.31
1977	102,631	11.4	10.7	0.9	1.25	108,919	14.5	9.4	0.6	1.32	922,460	10.5	14.3	0.9	1.29
1979	110,657	7.8	9.4	0.9	1.21	114,690	5.3	7.6	0.7	1.28	999,264	8.3	12.6	0.8	1.26
1981	111,738	1.0	10.1	0.9	1.20	122,908	7.2	7.7	0.7	1.27	1,052,002	5.3	12.2	0.9	1.25
		(21.3)					(29.2)					(26.0)			
Eglinton															
1975	56,514		8.6	1.2	1.27	56,551		7.9	1.1	1.35	477,570		13.1	1.3	1.31
1977	59,036	4.5	8.6	1.3	1.27	62,488	10.5	7.2	1.0	1.32	494,545	3.6	12.1	1.3	1.30
1979	59,412	0.6	7.9	1.3	1.26	61,585	-1.4	6.9	1.0	1.31	511,093	3.3	11.5	1.3	1.28
1981	60,475	1.8	8.5	1.3	1.25	61,939	0.6	7.2	1.2	1.29	531,637	4.0	11.7	1.3	1.26
		(7.0)					(9.5)					(11.3)			
C.P. N. Toronto															
1975	19,583		7.7	1.9	1.34	23,627		6.1	1.5	1.40	176,987		11.0	1.8	1.40
1977	20,671	5.6	8.6	2.0	1.34	23,155	-2.0	6.6	1.6	1.38	180,527	2.0	11.2	2.0	1.35
1979	19,860	-3.9	9.7	1.6	1.31	23,949	-0.9	8.4	1.2	1.36	180,742	0.1	12.7	1.5	1.33
1981	20,346	2.4	9.6	1.6	1.28	23,217	1.2	8.3	1.1	1.35	182,379	0.9	12.6	1.6	1.32
		(3.9)					(-1.7)					(3.0)			
Taylor Creek															
1975	18,679		8.4	1.0	1.31	16,950		8.6	1.3	1.39	154,319		13.5	1.2	1.32
1977	18,452	-1.2	7.9	1.1	1.26	18,947	11.8	6.1	1.2	1.32	160,123	3.8	11.7	1.3	1.29
1979	18,826	2.0	7.0	1.1	1.28	17,312	-8.6	5.6	1.3	1.32	165,901	3.6	10.6	1.2	1.29
1981	17,256	-8.3	6.0	1.2	1.25	15,795	-8.8	5.5	1.3	1.32	155,994	-6.0	10.0	1.2	1.25
		(-7.6)					(-6.8)					(1.1)			



METRO CORDON COUNT PROGRAM 1981

EXHIBIT 28:
LOCATIONS OF SELECTED COUNTS ON MAJOR TRANSPORTATION FACILITIES

EXHIBIT 29: SELECTED COUNTS ON MAJOR TRANSIT FACILITIES

Location	A.M. Peak Hour Inbound					P.M. Peak Hour Outbound					7:00 A.M. - 7:00 P.M. (Two-way Totals)				
	Transit Passengers	% Change 75-77	% Change 77-79	% Change 79-81	% Change 75-81	Transit Passengers	% Change 75-77	% Change 77-79	% Change 79-81	% Change 75-81	Transit Passengers	% Change 75-77	% Change 77-79	% Change 79-81	% Change 75-81
Yonge Subway															
1. N. of York Mills Sta.															
1975	9,045					8,876					53,918				
1977	9,985	10.4				9,694	9.2				63,190	17.2			
1979	10,184		2.0			10,772		11.1			67,588		7.0		
1981	11,820			16.1	30.7	11,045			2.5	24.4	79,141			17.1	46.8
2. N. of Bloor Sta.															
1975	26,082					24,702					191,030				
1977	25,267	-3.1				21,888	-11.4				187,185	-2.0			
1979	19,025		-24.7			18,968		-13.3			159,999		-14.5		
1981	28,164			48.0	8.0	22,196			17.0	-10.1	186,819			16.8	-2.2
3. S. of College Sta.															
1975	22,892					19,358					171,802				
1977	29,966	30.9				23,728	22.6				186,388	8.5			
1979	22,119		-26.2			23,271		- 1.9			166,090		-10.9		
1981	27,620			24.9	20.7	22,679			-2.5	17.2	192,036			15.6	11.8
University-Spadina Subway															
4. S. of Queen's Pk. Sta.															
1975	13,871					9,476					58,882				
1977	9,360	-32.5				8,364	-11.7				50,631	-14.0			
1979	14,312		52.9			14,029		67.7			80,326		58.6		
1981	16,553			15.7	19.3	13,000			-7.3	37.2	87,324			8.7	48.3

EXHIBIT 29 (Continued)

Location	A.M. Peak Hour Inbound					P.M. Peak Hour Outbound					7:00 A.M. - 7:00 P.M. (Two-way Totals)				
	Transit Passengers	%Change 75-77	77-79	79-81	75-81	Transit Passengers	% Change 75-77	77-79	79-81	75-81	Transit Passengers	% Change 75-77	77-79	79-81	75-81
5. N. of Dupont Sta.															
1979	8,524					7,894					56,167				
1981	11,144			30.7		9,575			21.3		66,038			17.6	
6. S. of Wilson Sta.															
1979	2.285					3,266					18,427				
1981	2,723			19.2		3,337			2.2		23,684			28.5	
Bloor-Danforth Subway															
7. W. of Jane Sta.															
1975	9,097					8,468					71,811				
1977	9,923	9.1				8,959	5.8				63,191	-12.0			
1979	9,945		0.2			10,340		15.4			67,311		6.5		
1981	11,335			14.0		8,071			-21.9		71,913			6.8	
					24.6					-4.7					0.1
8. E. of St. George Sta.															
1975	15,603					14,739					154,664				
1977	11,446	-26.6				13,818	-6.2				146,266	-5.4			
1979	15,492		35.3			13,925		0.8			155,677		6.4		
1981	16,210			4.6		13,919			0		167,623			7.7	
					3.9					-5.6					8.4
9. E. of Yonge Sta.															
1975	17,267					16,439					139,094				
1977	18,846	9.1				17,909	8.9				132,640	-4.6			
1979	16,385		-13.1			17,248		-3.7			134,698		1.6		
1981	19,331			18.0		19,428			12.6		147,842			9.8	
					12.0					18.2					6.3

EXHIBIT 29 (Continued)

Location	A.M. Peak Hour Inbound					P.M. Peak Hour Outbound					7:00 A.M. - 7:00 P.M. (Two-way Totals)				
	Transit Passengers	% Change 75-77	77-79	79-81	75-81	Transit Passengers	% Change 75-77	77-79	79-81	75-81	Transit Passengers	% Change 75-77	77-79	79-81	75-81
10. W. of Vict. Pk. Sta.															
1975	10,313					8,822					70,021				
1977	11,219	8.8				10,737	21.7				71,105	1.5			
1979	10,782		-3.9			9,898		-7.8			65,965		-7.2		
1981	14,450			34.0		9,921			0.2		78,563			19.1	
					40.1					12.5					12.2
GO Commuter Rail*															
11. Lakeshore at Etob. Ck.															
1977	3,793					3,864					12,965				
1979	4,766		25.7			3,943		2.0			14,485		11.7		
1981	5,972			25.3		5,705			44.7		19,427			34.1	
					57.4					47.6					49.8
12. Lakeshore W. at Union															
1977	4,068					4,071					14,449				
1979	4,986		22.6			4,815		18.3			16,675		15.4		
1981	7,142			43.2		6,194			28.6		21,999			31.9	
					75.6					52.1					52.3
13. Lakeshore E. at Union															
1977	2,976					2,343					10,061				
1979	3,054		2.6			3,069		31.0			12,365		22.9		
1981	4,272			39.9		3,874			26.2		15,108			22.2	
					43.5					65.3					50.2
14. Lakeshore at Rouge R.															
1977	1,499					1,151					5,458				
1979	1,498		-0.1			1,518		31.9			6,771		24.1		
1981	2,135			42.5		1,906			25.6		8,038			18.7	
					42.4					65.6					47.3

EXHIBIT 29 (Continued)

Location	A.M. Peak Hour Inbound					P.M. Peak Hour Outbound					7:00 A.M. - 7:00 P.M. (Two-way Totals)				
	Transit Passengers	% Change 75-77	77-79	79-81	75-81	Transit Passengers	% Change 75-77	77-79	79-81	75-81	Transit Passengers	% Change 75-77	77-79	79-81	75-81
15. Georgetown at Union															
1977	1,729					1,842					3,910				
1979	1,871	8.2				1,788	-2.9				4,113	5.2			
1981	2,215		18.4		28.1	2,171		21.4		17.9	5,082		23.6		30.0
16. Georgetown at Indian L.															
1977	1,572					1,535					3,195				
1979	1,650	5.0				1,586	3.3				3,430	7.4			
1981	1,973		19.6		25.5	1,950		23.0		27.0	4,211		22.8		31.8
17. Richmond Hill at Union															
1979	1,091					943					2,034				
1981	1,239		13.6			1,083		14.8			2,322		14.2		
18. Richmond Hill at Steeles															
1979	444					405					849				
1981	555		25.0			489		20.7			1,044		23.0		

* Note: 1975 GO Transit not presented. See explanation.

EXHIBIT 30: SELECTED COUNTS ON EXPRESSWAYS

Location	A.M. Peak Hour (inbound-except where noted by *)					P.M. Peak Hour (outbound-except where noted by *)					7.00 A.M. - 7.00 P.M. (Two-way Totals)				
	Total Vehicles	2 year (6 year) % change	% Trucks	% Transit Vehicles	Aver. Auto Occup.	Total Vehicles	2 year (6 year) % change	% Trucks	% Transit Vehicles	Aver. Auto Occup.	Total Vehicles	2 year (6 year) % change	% Trucks	% Transit Vehicles	Aver. Auto Occup.
Highway 401															
19. At West Metro Boundary															
1975	3,207		20.8	0	1.19	2,986		16.7	0.3	1.37	56,290		27.9	0.2	1.33
1977	7,159	123.2**	13.6	0.3	1.20	5,873	96.7	14.8	0.1	1.31	84,371	49.9	24.5	0.4	1.33
1979	7,744	8.2	10.8	0.2	1.20	6,629	12.9	10.5	0.2	1.14	98,695	17.0	18.9	0.3	1.19
1981	8,489	9.6 (164.7)	10.6	0.4	1.16	8,528	28.6 (185.6)	9.9	0.3	1.22	119,571	21.2 (112.4)	18.4	0.4	1.20
20. At Humber R.															
1975	9,385*		15.9	0.5	1.13	9,464*		14.7	0.1	1.28	152,209		21.8	0.2	1.26
1977	10,771*	14.8	15.9	0.1	1.12	10,372*	9.6	17.6	0.1	1.16	166,312	9.3	22.7	0.3	1.23
1979	10,973*	1.9	11.5	0.1	1.10	11,601*	11.8	12.0	0.1	1.22	183,102	10.1	18.2	0.3	1.19
1981	10,523*	-4.1 (12.1)	14.2	0.1	1.13	11,172	-3.7 (18.0)	10.7	0.2	1.22	189,797	3.7 (24.7)	18.1	0.3	1.20
21. At CN Newmarket Subdivision															
1975	8,835*		10.7	0.1	1.10	10,275*		11.0	0.1	1.20	140,828		17.5	0.1	1.22
1977	11,479*	29.9	13.9	0.1	1.12	11,247*	9.5	15.4	0.1	1.37	169,429	20.3	19.6	0.2	1.29
1979	12,139*	5.7	10.2	0.1	1.10	11,093*	-1.4	10.6	0.1	1.22	169,699	0.2	17.8	0.3	1.23
1981	12,024*	-0.9 (36.1)	11.2	0.2	1.15	11,112	0.2 (8.1)	13.3	0.3	1.19	190,481	12.3 (35.3)	15.7	0.4	1.19
22. At CN Bala Sub															
1975	9,335		11.9	0	1.16	7,496		12.6	0	1.21	127,352		21.0	0.2	1.23
1977	10,388	11.3	13.7	0.1	1.21	10,596	41.4	11.6	0.1	1.25	153,645	20.6	20.8	0.2	1.21
1979	11,494	10.6	9.0	0.2	1.12	10,170	-4.0	6.9	0.2	1.15	165,458	7.7	16.2	0.3	1.18
1981	8,057*	-29.9 (-13.7)	12.4	0.2	1.09	8,015*	-21.2 (6.9)	17.6	0.1	1.21	150,882	-8.8 (18.5)	17.5	0.3	1.18

EXHIBIT 30 (Continued)

Location	A.M. Peak Hour (inbound-except where noted by *)					P.M. Peak Hour (outbound-except where noted by *)					7.00 A.M. - 7.00 P.M. (Two-way Totals)				
	Total Vehicles	2 year (6 year) % change	% Trucks	% Transit Vehicles	Aver. Auto Occup.	Total Vehicles	2 year (6 year) % change	% Trucks	% Transit Vehicles	Aver. Auto Occup.	Total Vehicles	2 year (6 year) % change	% Trucks	% Transit Vehicles	Aver. Auto Occup.
23. At CN Uxbridge Subdivision															
1975	7,403		12.1	0.2	1.22	6,478		12.3	0.2	1.28	92,113		20.4	0.4	1.32
1977	9,061	22.4	12.1	0.1	1.24	8,187	26.4	10.5	0.1	1.23	106,631	15.8	20.4	0.3	1.28
1979	8,628	-4.8	8.7	0.2	1.24	7,991	-2.4	6.5	0.2	1.23	110,282	3.4	15.9	0.3	1.24
1981	9,916	14.9 (33.9)	8.3	0.3	1.26	8,386	4.9 (29.5)	7.8	0.2	1.24	124,774	13.1 (35.5)	15.4	0.3	1.24
24. At East Metro Boundary															
1975	3,337		14.1	0.2	1.18	3,210		13.9	0.2	1.37	44,723		22.8	0.3	1.38
1977	4,963	48.7	12.5	0.2	1.22	3,956	23.2	14.4	0.1	1.32	56,884	27.2	22.4	0.4	1.40
1979	4,596	-7.4	9.0	0.1	1.24	4,906	24.0	7.0	0.1	1.30	60,123	5.7	16.5	0.4	1.30
1981	5,266	14.6 (57.8)	8.8	0.3	1.27	5,184	5.7 (61.5)	7,2	0.3	1.30	65,172	8.4 (45.7)	16.2	0.4	1.30
Highway 400															
25. At North Metro Boundary															
1975	2,690		16.5	0.4	1.20	3,318		20.7	0.3	1.58	34,331		26.1	0.3	1.39
1977	3,104	15.4	19.9	0.4	1.26	2,928	-11.8	19.6	0.3	1.38	38,612	12.5	27.1	0.3	1.33
1979	2,912	-6.2	10.5	0.5	1.16	3,088	5.5	8.6	0.4	1.17	39,107	1.3	19.0	0.5	1.24
1981	3,040	4.4 (13.0)	11.4	0.4	1.17	3,255	5.4 (-1.9)	12.9	0.3	1.28	41,517	6.2 (20.9)	20.2	0.4	1.26
Highway 409															
26. At West Metro Boundary															
1979	1,642*		6.3	0.2	1.22	2,093*		8.9	0.1	1.31	23,340		13.5	0.6	1.34
1981	2,089*	27.2	9.1	0.1	1.22	2,533*	21.0	7.2	0.1	1.28	28,724	23.1	15.8	0.5	1.31

EXHIBIT 30 (Continued)

Location	A.M. Peak Hour (inbound-except where noted by *) Total Vehicles	2 year (6 year) % change	% Trucks	% Transit Vehicles	Aver. Auto Occup.	P.M. Peak Hour (outbound-except where noted by *) Total Vehicles	2 year (6 year) % change	% Trucks	% Transit Vehicles	Aver. Auto Occup.	7.00 A.M. - 7.00 P.M. (Two-way Totals) Total Vehicles	2 year (6 year) % change	% Trucks	% Transit Vehicles	Aver. Auto Occup.
Highway 427															
27. S. of Hwy 401															
1975	5,167*		16.9	0.3	1.17	5,113*		18.1	0.6	1.29	83,891		23.7	0.4	1.30
1977	6,423	24.3	17.6	0.3	1.29	6,443*	26.0	16.9	0.3	1.36	99,078	18.1	23.1	0.5	1.37
1979	6,892*	7.3	12.8	0.4	1.16	6,420	-0.4	12.6	0.3	1.26	107,086	8.1	18.1	0.5	1.25
1981	7,427	7.8 (43.7)	12.3	0.3	1.16	7,781*	21.2 (52.2)	10.3	0.4	1.24	122,641	14.5 (46.2)	16.6	0.5	1.24
W.R. Allen Road															
28. S. of Hwy 401															
1975	1,986		10.1	0.4	1.28	1,904		10.2	0.4	1.29	28,806		14.0	0.2	1.31
1977	2,530	27.4	9.4	0.7	1.22	2,569	34.9	8.8	0.2	1.27	40,716	41.3	12.7	0.3	1.27
1979	2,922	15.5	5.9	0.1	1.20	3,422	33.2	5.2	0.2	1.27	50,450	23.9	8.6	0.3	1.25
1981	2,947*	0.9 (48.4)	5.2	0.2	1.17	3,474	1.5 (82.5)	6.5	0.2	1.28	52,377	3.8 (81.8)	9.1	0.3	1.27
Don Valley Pkwy./Hwy. 404															
29. At North Metro Boundary															
1979	1,867		17.5	1.0	1.21	1,721		6.3	0.5	1.20	24,306		15.6	0.7	1.25
1981	2,757	47.7	10.3	0.3	1.22	3,089	79.5	10.0	0.2	1.26	37,094	52.6	15.1	0.4	1.26
30. S. of Hwy 401															
1975	4,925		9.5	0.3	1.27	5,146		7.3	0.1	1.32	79,490		16.0	0.2	1.27
1977	4,921	4.2	7.5	0.2	1.32	5,223	1.5	14.3	0.4	1.26	88,411	11.2	15.0	0.5	1.26
1979	5,091	3.5	6.1	0.3	1.21	5,668	8.5	6.5	0.4	1.22	104,989	18.8	11.3	0.4	1.22
1981	5,502	8.1 (16.5)	6.7	0.3	1.18	6,399	12.9 (24.4)	5.5	0.2	1.16	108,728	3.6 (36.8)	10.4	0.2	1.18

EXHIBIT 30 (Continued)

Location	A.M. Peak Hour (inbound-except where noted by *)					P.M. Peak Hour (outbound-except where noted by *)					7.00 A.M. - 7.00 P.M. (Two-way Totals)				
	Total Vehicles	2 year (6 year) % change	% Trucks	% Transit Vehicles	Aver. Auto Occup.	Total Vehicles	2 year (6 year) % change	% Trucks	% Transit Vehicles	Aver. Auto Occup.	Total Vehicles	2 year (6 year) % change	% Trucks	% Transit Vehicles	Aver. Auto Occup.
31. At Taylor Ck.															
1975	5,129		7.5	0.1	1.33	5,032		10.1	0	1.31	83,237		15.6	0.2	1.28
1977	5,120	1.3	7.6	0.2	1.28	4,756	- -5.4	6.5	0.2	1.28	85,180	2.3	13.0	0.3	1.26
1979	5,164	0.9	6.1	0.1	1.27	4,549	-4.4	7.8	0.2	1.17	90,451	6.2	10.8	0.3	1.26
1981	4,866	-5.8 (-3.7)	5.4	0.2	1.21	5,457	20.0 (8.5)	2.9	0.1	1.26	86,381	-4.5 (3.8)	9.7	0.3	1.22
Gardiner Expwy															
32. At West Metro Boundary															
1975	6,731		7.9	0.2	1.18	6,570		8.5	0.2	1.34	89,494		16.8	0.3	1.30
1977	7,498	11.4	9.1	0.2	1.29	6,919	5.3	9.1	0.2	1.34	101,080	12.9	17.1	0.4	1.35
1979	7,132	-4.9	9.3	0.3	1.27	7,024	1.5	6.2	0.3	1.34	108,260	7.1	15.3	0.4	1.31
1981	9,140	28.2 (35.8)	6.0	0.3	1.18	6,778	-3.5 (3.2)	5.0	0.2	1.25	117,190	8.3 (31.0)	11.6	0.4	1.25
33. At Bathurst St															
1975	5,212		8.8	0.2	1.34	6,043		6.6	0.3	1.36	89,480		14.3	0.4	1.29
1977	5,171	-0.8	9.5	0.1	1.26	5,685	-5.9	7.0	0.5	1.36	91,924	2.7	14.6	0.4	1.30
1979	5,201	0.6	11.1	0.3	1.30	6,845	20.4	7.3	0.1	1.66	96,454	4.9	14.9	0.5	1.33
1981	5,211	0.2 (0)	11.8	0.5	1.24	5,210	-23.9 (-13.8)	12.7	0.4	1.28	95,419	-1.1 (6.6)	16.2	0.6	1.28
34. At Cherry St															
1975	4,097		10.4	0	1.24	4,045		10.3	0	1.29	54,559		16.9	0.2	1.28
1977	4,157	1.5	10.0	0.1	1.26	4,183	3.5	12.7	0.1	1.24	55,008	0.8	16.4	0.2	1.24
1979	5,642	35.7	7.4	0	1.55	4,587	9.7	11.2	0	1.30	64,595	17.4	16.4	0.2	1.35
1981	4,335	-23.2 (5.8)	12.5	0.2	1.28	4,337	-5.5 (7.3)	9.1	0.2	1.32	62,460	-3.3 (14.5)	17.6	0.6	1.27

** Note: Highway 401 under construction west of West Metro Boundary. May, June 1975

EXHIBIT 31: VEHICLE TRIPS CROSSING MAJOR CORDONS

Cordon	A.M. Peak Period 7:00-9:00 A.M. (Inbound)							P.M. Peak Period 4:00-6:00 P.M. (Outbound)							7:00 A.M. - 7:00 P.M. (Two-way Totals)						
	Total Vehicles	Autos		Trucks		Transit		Total Vehicles	Autos		Trucks		Transit		Total Vehicles	Autos		Trucks		Transit	
		No.	%	No.	%	No.	%		No.	%	No.	%	No.	%		No.	%	No.	%	No.	%
METRO BOUNDARY																					
1975	73,029	63,196	86.5	9,574	13.1	259	0.4	76,050	66,388	87.3	9,373	12.3	289	0.4	581,410	472,139	81.2	106,943	18.4	2,328	0.4
1977	90,573	79,403	87.7	10,731	11.8	439	0.5	88,598	78,632	88.8	9,537	10.7	429	0.5	670,691	547,768	81.7	119,171	17.7	3,752	0.6
1979	97,081	86,266	88.9	10,299	10.6	516	0.5	101,922	92,679	90.9	8,733	8.6	510	0.5	748,916	630,035	84.1	114,760	15.3	4,121	0.6
1981	114,126	102,268	89.6	11,247	9.9	611	0.5	115,136	103,848	90.2	10,671	9.3	617	0.5	871,053	737,899	84.7	128,273	14.7	4,881	0.6
SUBURBAN																					
1975	109,457	97,113	88.7	11,422	10.4	922	0.9	108,638	98,340	90.5	9,476	8.7	822	0.8	881,097	745,336	84.6	127,990	14.5	7,771	0.9
1977	116,192	104,973	90.3	10,185	8.8	1,034	0.9	116,043	105,993	91.3	9,146	7.9	909	0.8	936,569	803,987	85.8	123,388	13.2	9,194	1.0
1979	122,501	110,746	90.4	10,654	8.7	1,101	0.9	125,949	116,282	92.3	8,701	6.9	966	0.8	991,626	860,195	86.7	121,827	12.3	9,604	1.0
1981	123,015	110,693	90.0	11,085	9.0	1,237	1.0	131,547	120,741	91.8	9,779	7.4	1,027	0.8	1,040,770	906,292	87.1	123,929	11.9	10,549	1.0
RAILWAY																					
1975	74,164	66,112	89.1	6,953	9.4	1,099	1.5	78,272	71,237	91.0	5,971	7.6	1,064	1.4	595,792	500,552	84.0	85,655	14.4	9,585	1.6
1977	77,170	68,299	86.5	7,770	10.1	1,101	1.4	77,641	70,022	90.2	6,548	8.4	1,071	1.4	614,508	516,063	84.0	88,459	14.4	9,986	1.6
1979	80,307	70,947	88.3	8,391	10.5	969	1.2	82,120	73,592	89.6	7,596	9.3	932	1.1	636,413	530,750	83.4	96,597	15.2	9,066	1.4
1981	78,047	68,402	87.7	8,591	11.0	1,054	1.4	78,685	70,130	89.1	7,603	9.7	952	1.2	627,999	522,078	83.1	96,332	15.3	9,589	1.5
DOWNTOWN CORE																					
1975	20,729	18,122	87.4	1,976	9.5	631	3.1	24,846	22,489	90.5	1,709	6.9	648	2.6	220,835	187,142	84.7	27,768	12.6	5,925	2.7
1977	21,816	19,245	88.2	1,958	9.0	613	2.8	26,223	23,841	90.9	1,718	6.6	664	2.5	228,874	195,667	85.5	27,343	12.0	5,864	2.5
1979	22,206	19,372	87.2	2,222	10.0	612	2.8	27,104	24,404	90.0	2,055	7.6	645	2.4	236,458	200,085	84.6	30,619	13.0	5,754	2.4
1981	24,084	20,936	86.9	2,601	10.8	547	2.3	26,094	23,522	90.1	2,057	7.9	515	2.0	246,296	207,534	84.3	33,564	13.6	5,198	2.1

EXHIBIT 32: PERSON TRIPS CROSSING MAJOR CORDONS

Cordon	A.M. Peak Period 7:00 - 9:00 A.M. (Inbound)							P.M. Peak Period 4:00-6:00 P.M. (Outbound)							7:00 A.M. - 7:00 P.M. (Two-way Totals)						
	Total Persons	Auto		Transit		GO		Total Persons	Auto		Transit		GO		Total Persons	Auto		Transit		GO	
		No.	%	No.	%	No.	%		No.	%	No.	%	No.	%		No.	%	No.	%	No.	%
METRO BOUNDARY																					
1975	90,029	77,779	86.4	5,409	6.0	6,841	7.6	102,466	90,783	88.6	6,354	6.2	5,329	5.2	694,418	629,050	90.6	49,352	7.1	16,016	2.3
1977	115,687	98,206	84.9	8,802	7.6	8,679	7.5	121,708	104,252	85.6	9,683	8.0	7,773	6.4	811,946	720,891	88.8	69,437	8.5	21,618	2.7
1979	123,265	104,806	85.0	7,779	6.3	10,680	8.7	137,144	118,783	86.6	9,251	6.8	9,110	6.6	893,391	801,410	89.7	66,446	7.4	25,535	2.9
1981	149,123	123,993	83.2	11,325	7.5	13,805	9.3	158,904	132,613	83.5	14,158	8.9	12,133	7.6	1,053,735	928,159	88.1	92,856	8.8	32,720	3.1
SUBURBAN																					
1975	185,683	123,512	66.5	52,665	28.4	9,506	5.1	193,652	130,937	67.6	54,843	28.3	7,872	4.1	1,268,489	970,583	76.5	275,890	21.8	22,016	1.7
1977	203,091	132,408	65.2	59,008	29.1	11,675	5.7	209,012	139,166	66.6	58,507	28.0	11,339	5.4	1,364,393	1,037,038	76.0	298,704	21.9	28,651	2.1
1979	214,868	137,772	64.1	61,969	28.9	15,127	7.0	230,879	150,431	65.2	67,005	29.0	13,443	5.8	1,441,724	1,091,085	75.7	316,270	21.9	34,369	2.4
1981	224,942	135,613	60.3	70,967	31.5	18,362	8.2	236,609	155,019	65.5	64,817	27.4	16,773	7.1	1,530,137	1,134,972	74.2	352,726	23.0	42,439	2.8
RAILWAY																					
1975	215,695	87,958	40.7	118,779	55.1	8,958	4.2	231,381	97,355	42.1	126,025	54.4	8,001	3.5	1,264,867	657,062	51.9	586,532	46.4	21,273	1.7
1977	227,551	90,628	39.8	125,116	55.0	11,807	5.2	231,422	95,711	41.3	125,126	54.1	10,585	4.6	1,311,140	677,910	51.7	604,843	46.1	28,420	2.2
1979	233,674	95,898	41.0	122,330	52.4	15,446	6.6	242,214	102,486	42.3	125,827	52.0	13,901	5.7	1,336,908	695,500	52.0	605,931	45.3	35,477	2.7
1981	257,195	89,275	34.7	148,479	57.7	19,441	7.6	246,443	93,319	37.9	136,104	55.2	17,020	6.9	1,412,930	673,311	47.6	695,108	49.2	44,511	3.2
DOWNTOWN CORE																					
1975	97,132	25,198	26.0	62,976	64.8	8,958	9.2	99,592	32,119	32.3	59,472	59.7	8,001	8.0	564,209	246,442	43.7	296,494	52.5	21,273	3.8
1977	96,110	25,987	27.0	58,316	60.7	11,807	12.3	111,119	33,560	30.2	66,974	60.3	10,585	9.5	591,838	254,579	43.0	308,839	52.2	28,420	4.8
1979	102,506	26,127	25.5	60,933	59.4	15,446	15.1	106,642	34,051	32.0	58,690	55.2	13,901	12.8	594,422	255,438	43.0	303,507	51.1	35,477	5.9
1981	111,511	27,434	24.6	64,636	58.0	19,441	17.4	118,555	32,278	27.2	69,257	58.4	17,020	14.4	647,432	265,320	41.0	337,601	52.1	44,511	6.9

METRO CORDON COUNT PROGRAM 1981